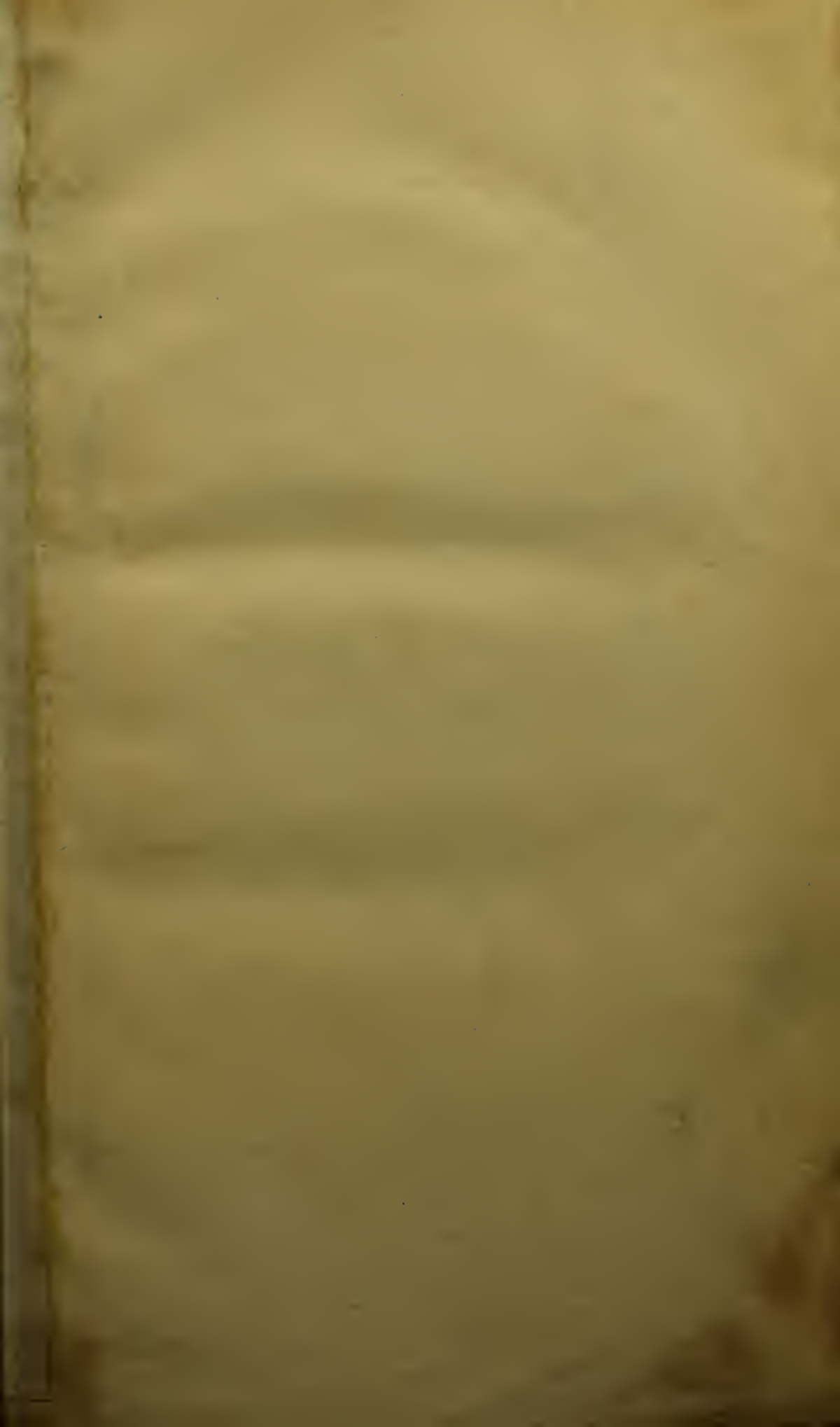




33596/2/1st 2



Leiden.





A
PHYSICAL VIEW
OF
MAN AND WOMAN
IN A
STATE OF MARRIAGE.

WITH
ANATOMICAL ENGRAVINGS.



TRANSLATED FROM
The last French Edition of M. DE LIGNAC.



VOLUME II.



LONDON:
PRINTED FOR VERNOR AND HOOD,
IN THE POULTRY.

1798.

1770052761
E2108



C O N T E N T S

OF THE

SECOND VOLUME.

	Page
CHAPTER I.	
<i>On the INFLUENCE of MARRIAGE on</i> HEALTH	3
CHAPTER II.	
<i>On the PARTS of MAN which serve to</i> GENERATION	46
CHAPTER III.	
<i>On the PARTS of WOMAN which serve</i> to GENERATION	82
CHAPTER IV.	
<i>On PUBERTY</i>	114

CHAPTER

<i>CHAPTER V.</i>		Page
<i>On VIRGINITY</i>	. . . . .	177

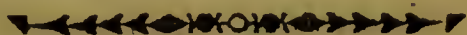
<i>CHAPTER VI.</i>		
<i>On the SEMINAL LIQUOR</i>	. . . . .	213

<i>CHAPTER VII.</i>		
<i>On the MENSTRUAL FLUX</i>	. . . . .	256

<i>CHAPTER VIII.</i>		
<i>On GENERATION</i>	. . . . .	289

<i>ANATOMICAL DESCRIPTION of the PLATES</i>		
<i>contained in this Work</i>		. . . . . 349
INDEX	. . . . .	367

A
PHYSICAL VIEW
OF
MAN AND WOMAN,
IN A
STATE OF MARRIAGE.



CHAP. I.

ON THE INFLUENCE OF
MARRIAGE ON HEALTH.

L'abstinence ou l'excès, ne fit jamais d'heureux.

VOLTAIRE.

Excess or abstinence ne'er yet form'd happiness.

I HAVE spoken of the pleasures which accompany the conjugal union, considered as a band that unites hearts: in this Chapter, I shall treat of the utility and inconveniences which result from an union of the sexes.

We have seen, in the article of the Temperaments, that there are some men to whom enjoyment is necessary ; and that others, of a cold constitution, are but seldom impelled to love. From these differences arise, consequently, the measure which each individual ought to take of his strength, that he may not outrage Nature by committing excesses which she never avows.

Pleasure, when used with moderation, is undoubtedly one cause that concurs to the maintenance of health: a super-abundance of the prolific liquor in a vigorous man, at the prime of his life, molests the functions, and even affects the spirits, if this man obstinately continues in a celibate condition. Those who have denied that this super-abundance can ever produce any injurious consequences, paid but little attention to an object so highly interesting.

Galen views the retention of the seed as capable of producing very serious accidents. This celebrated Physician has conserved to us the history of a man and a woman who lost their health from an excess of that humour, and who were cured by renouncing the continence which

which they had imposed on themselves. The observations which I have adduced, after treating of the Temperaments, prove that there are few practitioners who have not perceived this influence of the feminal liquor on certain persons.

Zacutus speaks of two persons, in whom a suppression of the pleasures of love was followed by dreadful symptoms. The one was attacked with a tumour on the navel, which no effort of art could diminish, but that vanished after marriage: the other had recourse to physicians, who did not examine his case with sufficient attention. He had swimmings in the head; was afterwards attacked by the epilepsy, and died in a violent access. On opening the body, the cause of the malady was found in the feminal vessels and the deferent canal.

M. Tissot relates*, that a physician, respectable through his knowledge and his age, who had for a long time attended the Austrian armies

* See *l'Onanisme*, art. IV. sect. XI.

in Italy, remarked that, among the German soldiers, those who were not married, and still led a sober life, had often epileptic fits and a priapism.

Lanzoni has left two observations, which prove the efficacy of marriage in certain diseases. The first concerns a young man attacked by a quartan ague, that opposed all the resources of art, and which was cured through the complaisance of a woman who interested herself in his fate. The second observation has for its subject, a young widow of an ardent temperament, who being attacked with the epilepsy, found her cure in the arms of a second vigorous husband*.

The reader will recollect what I have elsewhere said, in speaking of the tract on Nymphomany. He must there have seen, that the most efficacious remedies for accidents produced by this cruel malady, is marriage; which the author's observations demonstrate in an incontestable manner†.

* See *Anecdotes de Méd.* CCXXVI.

† See pag. 75, 120, 149 & 150, of the octavo edition.

Anatomists coincide with what we advance. Riolan dissected a woman aged thirty years; and from an inspection of the ovary, he did not hesitate in the least to assert, that the death of this woman was a consequence of the single state in which she had lived. M. le Duc, a celebrated Surgeon, made the same observation at the Saltpetre Hospital in Paris*; and I must remark, that there are few practitioners who cannot furnish an observation on this subject, particularly among those who attend to common cases in great infirmaries, where individuals of both sexes are assembled, who live in a state of celibacy.

These observations suffice for demonstrating, that there are some circumstances in which marriage may be recommended as the most efficacious means to obtain the cure of many diseases. Those even which are attached to the ruling constitution of every individual, disappear at the sight of Love. Men of a bilious temperament are subject to various indis-

* *Tableau de l'Amour Conjugal.* Part III. chap. II. See also Ambroise Paré, *de la Génération*, chap. LII—LVII.

positions, when they deprive themselves of connubial pleasures. These delights support gaiety, with the plethoric man; give birth to it in the melancholic, and gently warm the puitous. There is no person who has not remarked that the torpor, heaviness, and lassitude produced by indolence; fatiguing dreams, restlessness, and other indispositions; are prevented by the moderate use of pleasures, or greatly calmed, as soon as those joys are prudently regulated.

It would be difficult to give a more sensible proof of the influence of marriage on health, than by shewing the effects which it operates on young women who have *pale colours*. Without always attributing this indisposition to love, for it has very frequently other causes, it is certain that the pleasures of marriage powerfully concur to re-establish the health of persons attacked by this disease. Observe a young woman, whose pale and yellow visage announces the complaint with which she is tormented; her body is lumpish, her head dolorous, her respiration, interrupted every moment, will only permit her, with pain, to articulate some words, which she pronounces
with

with a feeble, tremulous, and obstructed voice: she desires aliments that are pernicious, and refuses those which her condition requires: her dull eyes, her gloomy and drooping aspect, excite the compassion of every beholder; she seems no longer connected to the world, and all in Nature is indifferent to her eyes, excepting the lover for whom her heart still conserves some activity. When hymen softens her lot, all undergoes a change; it is a ray of the sun, which dissipates the clouds that obscure the heavens; lilies and roses impress their blossoms on the fair-one's visage, and proclaim her joy.

As much as physical love, when used with moderation, sheds salutary influences on the health, its excessive usage plunges us as far, on the other hand, into terrific situations. By forcing pleasure, we empoison an agreeable and generous liquor; by exhausting our powers in repeating enjoyments too often, we dig a pit, which is not perceivable till we fall, headlong, to the bottom.

The importance of the seminal liquor, in supporting vigorous health, announces the constant necessity for returning a part of this pre-

cious fluid to the mass of blood, after it has attained all its perfection: nothing can occupy its place in u ; while Physicians of all ages have been unanimously of opinion, that the loss of one ounce of this humour weakens more than that of forty ounces of blood. So long as the seed is in the body, it must necessarily be admitted as an agent that communicates strength to all the parts, and gives them new vigour. The changes which it operates in us at the age of puberty, and which we do not remark in Eunuchs, serve as an incontestable proof of this observation.

Too great a dissipation of the seminal liquor, is not that alone which may injure health in the use of physical love: the manner in which we present ourselves for sacrificing thereto, contributes sometimes to those pernicious consequences, as I have observed in the Chapter on STERILITY; and to this I may add, the too violent agitations in an act, which does not require any uncommon efforts, when the dictates of Nature are followed.

In considering the too frequent emission of the prolific liquor, as the sole cause of the diseases

eases that succeed often repeated acts, (and this cause is alone sufficient to occasion them) we shall find observations made by all Practitioners, ancient and modern, capable of terrifying temerarious men, who sacrifice their health to their pleasures.

Hippocrates, the most ancient and the most exact of observers, well knew the mischiefs produced by an abuse of the pleasures of love. These he describes under the name of *consumption dorsale*. This disease, says he, originates in the spinal marrow. It attacks the newly-married and the *libidinous*. They have no fever; and, though eating with a good appetite, they consume and become lean. Persons thus diseased, imagine they feel ants descending from their head through the whole length of the spine. Every time they have a stool, or an evacuation of urine, they lose abundantly a seminal liquor which is very limpid.

They are incompetent to generation, and often occupied with the venereous act in their dreams. Walking, particularly in rugged places, almost deprives them of breath; weakens, procures them the head-ach and a ringing in the ears;

ears: in fine, a severe fever terminates their existence*.

Areteus thus describes the evils produced by a too abundant evacuation of the seed. Young persons, says he, acquire the gait and the infirmities of old men: they become pale, effeminate, torpid, slothful, cowardly, stupid, and even imbecile; their body is crooked, and their legs unable to support them: they have a general aversion, find themselves wholly incapable of any thing, and many are afflicted with the palsy.

Lommius, in his Treatise on Diseases, forcibly describes the consumption which manifests itself as a consequence of exhausted pleasures. I have remarked it more than once, says this physician, in the exercise of my profession.

* *Lib. II. de Morbis.* In Book VI. sect. 8, of the Epidemical Diseases, Hippocrates likewise speaks of the spinal consumption, under the denomination of *Tabes Dorsalis*: we there find the striking observation of a young man who was attacked by this disease, in his twenty-fifth year, and died in consequence.

These

These sorts of patients, though they have neither fever or distaste, do not extract any nourishment from the aliments which they use... the more inveterate the disease is, the more does the patient suffer; his legs swell...and some persons have ulcers in the loins, which, while curing in one place, are re-produced in another.... at length, a *suffusion* takes place, that renders them entirely blind. We observe that this malady sometimes ceases, and afterward returns again: this I have seen occur, continues Lom-mius, at the end of seven years, in the case of a physician, who lost his sight in consequence; proving on himself the agonising event of that disease, which he had before remarked in many others*.

* *Tableau des maladies*, &c. art. XXIX. *la Phthise dorsale*. We may add to those authors we have cited, the frightful pictures which are found in Celsus, Galen, Actius, Tulpius, Hoffman, Boerhave, M. Van Swieten, &c. See *l'Onanisme*, in which M. Tissot has joined his particular observations to those of the celebrated men above-mentioned: art. I. sect. IV. V., art. II. sect. V. VIII.; art. III. sect. X. of the third edition, printed at Lausanne 1764.

The

The symptoms which accompany diseases caused by uncommon exhaustions, are not always so deplorable: but it is no less true, that enjoyment, too frequently repeated, undermines us insensibly, and that we perceive the evil when it is too late to remedy it. It corrupts our understanding, diminishes our courage, and impedes the elevation of our soul. We do not pay sufficient attention to the mischievous consequences of the unbridled passions, because some persons, for a long time, are not conscious of their effects; I may say, not till the period when they commence, in some sort, to abandon society, through the inability of appearing there to advantage. Nobody, then, directs the eye towards them: retired in the bosom of their family, if they have still the happiness to possess these aids, they suffer the most cruel tortures, which are unknown to the rest of mankind; and pay the tribute which Nature has imposed on debauchery. — Why does there not a tribunal exist, to which every Physician might repair, and publicly say: “The patient who is about to die, has abridged his days, by indulging in excess!” At least, it would instruct those men who are ignorant of what this excess may occasion; and others to whom

whom it is known, but who do not profit from that knowledge, would be terrified by the number of victims who fall under the dagger of libertinism.

The Physician who wisely observes, has opportunities, every day, of reconnoitring this fatal influence of excess on life. His attendance, even, is not requisite for penetrating into the causes which have made a vigorous man weak, and who only remains in the world, because his disease has not yet operated with all its activity. I picture to myself a person who loses his fatness by degrees; his head, as formerly, is no more ornamented with hair; his eyes are dull, livid, full of grief, hollow, and capable only of discerning objects at a small distance; his cheeks are discoloured, and flabby; the nostrils withered, the forehead parched and callous; respiration is difficult, the whole body loses its rectitude, &c. I observe with anguish, that this person is not sensible of his condition; that he continues to deliver himself up ardently to pleasures; and that he will not perceive his danger, till the brain, the stomach, the breast, in short all the viscera, refuse to discharge the functions for which they are destined.

destined. Ah! says Venette, how beguiling is the evil which love produces, even at the moment when it is most redoubtable!

There are some circumstances, in which pleasure, taken moderately even, may occasion death. It is certain that, in sickness, we must by no means have recourse to that indulgence; and it is no less certain, that it has proved mortal to some persons, who had not entirely recovered their strength before they gave way to the seductions of love. Pliny informs us, that the Pretor Cornelius Gallus and Titus Aetherius, Roman military men, lost their lives in the instant which Love had dedicated to pleasure*. Tabourot has conserved, in his motley work, several epitaphs of persons who died in tasting voluptuousness†. We see also

* A similar circumstance occurred, says Pliny also, in our time, to two young Romans, both of whom expired, having an affair with a theatrical performer...who was a very beautiful youth. Book VII. chap. 13.

† *Cy gist le Seigneur de Manas,
Lequel de sa propre allumelle
Se tua prenant ses ébats
Sur.....&c. &c.*

See

some examples of this in Montagne *. It would be difficult to explicate what may cause these accidents in persons who otherwise enjoy a good state of health: it may, however, be supposed, that violent love, a *contention* of the soul, is sufficient for suddenly arresting the course of the spirits in persons who are too passionate †. The uncommonness of these terrible incidents, must serve to tranquillise our minds on this occasion.

Galen relates, that a man who was not entirely cured of a violent illness, expired the same night in which he paid the conjugal tribute to his wife. M. Van Swieten knew a man subject to the epilepsy, who was attacked with an access on his nuptial night. Hoffman speaks of a very lubricous woman, who was

See *les Bigarrures & touches du Seigneur des Accords*, Chap. XXII. We there find Latin, French, and Italian Epitaphs, on the same subject.

* Book I. Chap. XIX.

† All the passions in general may occasion sudden death; of which, Authors of all ages have transmitted us examples: thus love may produce the same effect as joy, sorrow, anger, and malice.

attacked

attacked by the same complaint after each conjunction. Boerhave knew a man who died in the first enjoyment. M. de Sauvages has given us the singular observation of a man who, in the midst of the act, experienced a spasm, (and this disorder had then afflicted him twelve years) which stiffened his whole body, and occasioned a deprivation of sense and feeling. Bartholinus saw a newly married man, who, the second day of his nuptials, after conjugal excess, was attacked by a severe fever, accompanied with great lowness of spirits, swoonings, risings in the stomach, immoderate thirst, reveries, want of sleep, and abundant inquietudes. Chesnau saw a young married couple, who experienced accidents, the first week of their union, which conducted them to the grave in a few days*.

A melancholic man espoused a young widow during the heats of summer; he would signalise himself with his new companion, but became extraordinarily thin in consequence; and this was followed by insanity†. Fabricius

* See *l'Onanisme*. Art I. sect. I. IV.

† See *Tableau de l'Amour Conjugal*. Part III. chap. I.

Hilden has conserved to us the sad history of a young man, whose hand had been amputated, and who, as his cure advanced, would satisfy the desires: this design was, however, opposed by his wife, the surgeon having foretold her the injurious consequences which he had reason to apprehend. But the husband procured himself an emission of seed, without the participation of his wife, which was immediately followed by violent symptoms; and he died at the end of four days*.

I once saw a man who, after having been bled for a contusion, wished to convince his wife that he had not lost the whole of his powers; and in consequence excited a considerable hemorrhage at the part where the incision had been made: he was obliged to abstain a long time from connubial familiarities, because, on striving at a repetition, he felt himself attacked with dimnesses and the vertigo.

Men who are subject to attacks of the gout, cannot too much attach themselves to

* *L'Onanisme*. Art. IV. sect. XI.

subdue the ardour which carries them towards the venereous act; while experience every day demonstrates, that excess in this genus gives birth to the gouty affection. It is thus that M. Coste expresses himself in the interesting treatise which he has written on this malady. It is proved, that the too frequent effusions of the seed, to which men give way after having weakened themselves, affect in due time the power of the legs...: they are no more capable of walking, nor to sit, at length, without experiencing the most insupportable lassitudes. They lose the faculty of propagating, because the muscles can no longer contract, and their seed is too much degenerated: they are subject to tremblings, particularly after the venereous act; they lose their stomach, their appetite, and their blood is so far impoverished, that they easily fall into putrid and scorbutic diseases. The gout with which they are attacked, gives very quick birth to the stone in the reins and the bladder. — These are the persons subject to that species of disorder, called the flying gout, which throws itself so facilely on the viscera, and that kills the patient in three times four and twenty hours.

There

There are no means more certain, or more prompt, for acquiring the gout, than too great a resignation to venereous pleasure. It is a voluptuousness the most engaging, the most agreeable, and the most universally sought for in the four quarters of the world. From the country of the Hottentots to Lapland, and from Spain to Tartary, every man is affected, and seeks this voluptuousness ... and they have always paid extremely dear for their excesses; the price of which has very frequently been the gout. Practitioners have invariably found, that, among a hundred gouty patients, ninety acquired it no otherwise than by an abuse of Venus; and it is these, pursues M. Coste, who have occasioned a belief that the gout is incurable, because an enervated body is entirely destitute of resource: they nearly all die of that complaint. — We find, in Turkey, a great number of true Mussulmen attacked with the worst sort of gout: they never make use of wine; but they exhaust themselves in their *seraglios* *.

* *Traité pratique de la Goutte, par M. Coste, Conseiller, Docteur en Médecine, &c. Chap. VII.*

In youth, it is difficult to quit the pleasure of Venus: prudence must, nevertheless, be our guide on every occasion. Nothing will more promptly revive the gout, with all its violence, than the rambles of this genus. A young man should only resign himself to those joys, as much, or perhaps still less, than the duties of marriage demand; enough to give himself inheritors, and by no means endeavouring to satisfy the passion of one of the two spouses*.

Venette makes no difficulty in saying, that the gout, often engendered by the caresses of women, has frequently been cured through that means;—and that he has seen gouty persons who found relief, in using physical love with moderation†.

The Author of the Treatise on the Gout, differs very widely in opinion with Venette, when he says, that gouty patients may chuse between leaving their wives tranquil, and the cure of their disorder: or they may continue

* *Idem.* Chap. XXII.

† *Tableau de l'Amour Conjugal.* Part III. Chap. II.

to carefs them, and render their difeafe totally incurable. — Every time that a gouty patient beholds a woman, if he has youth on his fide, he adds a new root to his complaint; and, if advanced in years, he digs a fquare foot of his grave*.

Men are facilely led into error; and the belief which fome perfons entertain, that the venereous aft folaces gouty and many other patients, would furnish a proof of this affertion, if it were neceffary to shew the reception which we give to prejudices when they flatter our paffions.

There are certain difeafes which appear favourable to the action of the parts that co-operate to generation: in this clafs is placed the intoxication produced by pretended aphrodisiac fubftances; and we have elfewhere shewn the credit which ought to be given to thefe remedies†. We fhall here content ourfelves with reminding the reader, that aphrodisiac fubftances either excite delirium, and in this cafe a man whose temperament conducts him to

* *Traité-pratique de la Goutte: fee l'Appendice.*

† See Vol. I. Chap. IV. of this Work.

love will be excited to it ; or they operate in irritating the bladder, and then the parts which are adjacent to it become inflamed, notwithstanding which, a man cannot unite the circumstances which are absolutely necessary for the consummation of the act. It is thus that cantharides operate*, and that, when certain venomous animals have wounded a man, the venom proceeds with rapidity to the parts of generation, and there causes symptoms which are obstinately regarded as the signs of an extraordinary *puissance*†.

When the hydrophobic venom has begun to make some progress, it operates equally on the private parts; and whether it mixes with the feminal liquor, rendering it more acrid, more poignant, and that the urine, more ardent, irritates the feminal vesicles, as celebrated physicians pretend‡; or whether this virus does not

* *Idem, ibidem.*

† See *les recherches sur les Américains*. Part I.

‡ See *la Dissertation sur la nature & la cause de la Rage, par M. de Sauvages*. Art. *Priapisme des hydrophobes*. *Mémoires sur divers sujets de Médecine par M. le Camus, &c.*

communicate

communicate its destructive character to the humours; and that it only operates in offending the nerves*; it is no less true that hydrophobic patients are attacked with a priapism†.

The leprosy, that scourge which was brought into Europe at the time of the Crusades, and which the Europeans have carried to America, was regarded, and is still among the Americans, as a disease capable of augmenting the generative powers of men infected with it. The lubricity of leperous persons was excessive, they say, and even more dangerous than their disorder§.

Those who have the misfortune to be afflicted with the gout, know but too well that

* See *les Essais anti-hydrophobiques par M. Boudot en 1770.*

† *Boerhaave, aphorismes; Col de Villars, cours de chirurg. M. de Sauvages, dissert. sur la rage; M. Boudot, essais anti hydrop. Bonet. sepulchret, &c.*

§ *Recherches sur les Américains. P. IV. p. I. Voyage d'Ulloa au Pérou. Tome I. Oeuvres de Paré. Book XX. Chap. x.*

a violent irritation is sometimes felt in the parts of generation, or, to speak with more exactness, at the bladder and the reins; whether it is that the humour of the gout flies to these parts in preference, or that a stone begins to form in the one or in the other, which is very common in the disease that is here in question*.

Who will assert that, in all diseases which discover themselves by affecting the skin, and which, of consequence, must greatly alter the laws of transpiration, men do not believe they feel new strength for the venereous act, if they only consult the exterior organ, which is the principal agent of it?

It will result, from these different observations, that the use of aphrodisiacs, as I have already said, in irritating the parts of generation, may shew them in an imposing shape, which alone does not suffice for the consummation of the act. If the venom of madness produces the same effect, the humour of the leprosy, the matter of the gout, perhaps that

* See Paré. Book XVIII. chap. xii.

of the gall, &c. if the presence of a stone in the bladder suffices for impressing those who are thus attacked with an idea that, in the midst of dolours the most piercing, they shall find solace for their complaint by having recourse to the act of generation; it would be absurd to infer from thence, that those maladies are to be removed by means of an union of the sexes!

Such persons as, from imprudence or otherwise, may have made use of pretended aphrodisiacs, would treat themselves very badly, if they could not devise some other means of appeasing the symptoms which they experience, than through medium of the venereous act*.

Notwithstanding the erotic fury which is supposed in persons afflicted with the hydrophobia, a grievous observation announces that the usage of coition has sufficed for occasioning the death of a man bitten a long time before. In 1743, at Mauras, in France, a man became

* See chap. IV. of the first Volume; where will be found the remedies against the effects produced by cantharides and other poisons which some persons have had the temerity to employ.

furious

furious on his nuptial-night, and bit his wife in her breast, although he had been wounded by a mad-dog two years and half before that period. They both died shortly afterwards*.

It further results from these facts, that men, in all times, have proceeded from errors to errors; that nothing has escaped them, in an endeavour to stimulate their humiliated self love; and that their ambition would resort for expedients to means the most ridiculous, in order to avoid contemptuous and disrespectful imputations. — The deranged brains that employed pretended aphrodisiacs, have recounted the prodigies which succeeded, when their imprudence did not happen to occasion death. The gouty, men tormented with the stone, and even the leperous, are announced as always possessing faculties which other individuals envy. — Is it not singular, that an impotent man, who owes his infirmities to debauchery, and with whom the decayed organs experience only the acute sentiment of dolor, should still be esteemed capable of tasting voluptuousness?

* *Dissertation sur la rage, par M. de Sauvages.*

One observation, which every person may make, is, that men who marry, and resign themselves, with all the ardour of the temperaments, to the charms of voluptuousness, after having indulged but little in physical love, nearly always experience alarming indispositions. There are certain countries, even, where the accidents which befall young-married pairs, resemble each other through the analogy that exists between the constitution of every individual. I have seen a canton, where some part of the men who there married for the first time, lost their hair shortly afterwards. Bayle has remarked that, in Holland, the voice of the Protestant Ministers altered, to a certain point, after marriage.

These observations confirm what I have said of the influence of air and water in particular countries, in speaking of STERILITY. M. Pibrac read, at a public assembly of the Royal Chirurgical Academy, in 1760, a memoir, giving intimation that it would probably be succeeded by future labours, in which were established the rules of salubrity or insalubrity, as well absolute as relative, even in the different quarters of a city. This celebrated Surgeon believed, even, that every street has its particular

lar climate, through its affinity to the sun's aspect, and the influence of the winds; and that a salutary habitation to one person, becomes exceedingly prejudicial to another. Being charged, in 1743, with the inspection of thirty-six thousand men, who presented themselves for the purpose of drawing lots to serve in the Paris militia, he took advantage of that singular occasion, which brought before him, at one time, a great number of robust persons from every quarter of Paris; and he saw, at the same time, in particular, those who were excused from drawing, by reason of their infirmities. He remarked, that the men were strongest and most vigorous in the *Fauxbourgs S. Martin* and *S. Denis*; weakest in the city: that phthysical persons were most numerous in the quarter of *S. Honore*; diseases of the skin most frequent in the quarter of *S. Benoit*; that those who inhabited the quarter of *St. Antoine* were most subject to the stone; and those to the cataract in the lower end of the *Fauxbourg S. Germain*, towards the river, &c. &c. It is to be lamented, that the labours of M. Pibrac were not continued, that we might have digested such observations therefrom as relate to the increase of the human species.

The

The influence of physical love seems to occasion fewer ravages among women than men; and it is easy to account for this, [if we admit, with them, a feminal liquor] in saying that the fluid which they emit is, less precious, less laboured, than that of men. Besides, one part of the fair sex is difficultly *moved*, and another part possesses a constitution absolutely incompetent, I will not say to generation, but to pleasure, the excesses of which do not molest them... They do not incommode themselves at table, where they merely sit from motives of complaisance, and for whom the most exquisite wines have no attraction*.

* The females, whom indigence, or libertinism, casts into the unfortunate state of courtesans, would quickly become victims of the fatigues attached to their fate, if they did not estrange themselves from pleasure, even under the circumstances in which it is presented. Those who give way to its enticements, are frequently attacked by the diseases which follow exhausted powers. M. Tissot says that, in 1746, a young woman, of three and twenty, challenged six Spanish dragoons, and sustained their assaults during a whole night: she, however, expired in the evening of the next day. This shocking scene occurred at Montpelier. See *l'Onanisme*, art. II. sect. VII.

Enjoyment

Enjoyment is seldom followed by dangerous consequences, among women on whom Nature has bestowed an ardent temperament, to indemnify them for the little wisdom which they possess: we may say that, with these persons, pleasure is strictly corporeal; and thus can have no influence than on the body. These women are the portion of citizens the most utile to a state, since the children which they give it are the strongest; while those that owe their birth to a woman who joins with a lubricous temperament the art of analysing pleasure and of *trifling* with voluptuousness, are nearly all wretched individuals. The enjoyment of persons with whom imagination supplies corporal ability, degenerates into disease, in proportion as they become older: their sensations are then more vivid; the nerves are thereby exceedingly affected; and we have seen women who, after having passed their life in a succession of *sentimental* pleasures, experienced violent convulsions, when, in age, (and then the organs of voluptuousness will not obey the desires) they would still have recourse to the transports of love.

There

There are women for whom pleasure is dangerous, not in itself, but through the disposition of the parts which conduce to it. A man who is, in this respect, characterised to an excessive degree, renders his pleasures destructive to the fair companion of his bed. Those who, less favoured with regard to the body, imagine they can supply their deficiency by multiplied efforts, which are frequently inutile, incur the risque of one day seeing the weak woman that partakes of their transports, subjected to alarming diseases. These diseases are often incurable, because they have their seat in parts which Nature has concealed from our eyes, and that are scarcely ever attributed to the cause which produces them*. ‘The plea-

* There are few men whom Nature has enabled to wound the matrice in the caresses of love: but we find some who may occasion considerable hemorrhages, through their bad management or their brutality. These accidents are more frequent during pregnancy; and this is likewise a time in which men ought to use the greatest precaution in their embraces. I have spoken, in the Chapter on STERILITY, of forced attitudes, from whence great inconveniences may result; and from thence originate also many diseases, to which no attention is paid, till they have made sufficient progress

' fures even which men have in a knowledge
 ' of their wives, are reproveable, if they do
 ' not use those pleasures with moderation.....
 ' The dishonourable endearments suggested to
 ' us by the first fire, are not alone indecent,
 ' but prejudicial, employed towards our wives *.'

A Queen of Arragon was obliged to make
 an arret against a Catalonian, whose wife com-
 plained of his excessive vigour. This man
 owned, that every night was distinguished by
 ten triumphs; on which the Queen, after ma-
 ture deliberation in council, forbade this hero,
 on pain of death, to approach his wife more
 than six times each day! ' She stated that
 ' number,' says Montagne, ' as a lawful and
 ' necessary boundary; abundantly relaxing and
 ' departing from the wants and the desire of
 ' her sex, for establishing, she said, an easy and
 ' of consequence a permanent and immutable

gress for resisting the aid of medicine. *A History*
of the Diseases of married Persons, is now become
 more necessary than ever, and which, nevertheless,
 has not hitherto been undertaken, to my knowledge.

* *Montagne*. Book I. chap. xxix.

' form....

‘ form..... On this, the Doctors exclaimed,
 ‘ What must be the appetite and the concu-
 ‘ piscence of females, while they estimate their
 ‘ reason, their reformation; and their virtue,
 ‘ at such a price *!’

This singular incident is still less marvelous than a recent observation inserted in the *Journal de Médecine*. It relates to an old man, aged ninety-six years, ‘ who, having espoused a woman ninety-three years of age, performed the duties of marriage three times every night, with as much vigour as might have been expected of the most robust man. ‘ I am fully confident,’ says M. Benr, who wrote this observation, ‘ of the credit to which this circumstance is entitled. But, what surprises me most,’ continues he, ‘ is, that this athletic old man has experienced no sensible alteration in his health, although it is now

* Book III. chap. v. Venette, and, after him, the author of *Anecdotes de Médecine*, say that it was the King of Arragon who issued this Arret: but we have every reason to give more credit to the relation of Montagne, from the circumstances which he adduces of this singular cause.

‘ three years since he has accustomed himself to
‘ this exercise, nearly every night*.’

These observations seemingly lead me to examine how often, in one night, a man can taste the sweets of physical love. But it is an object which Venette has treated with too much prolixity for me to follow his traces. I consider pleasure relatively to the good or the evil which may from thence result, and by no means as an act that debauchery essays to multiply, and which pride still augments, when men would impose on us, in that respect, by their pretended exploits.

Ought we to place any confidence in young persons, whose assertions are dictated by vanity? Certainly not! or we must prepare ourselves to believe prodigies! There are some of these who speak with much apparent sincerity, and who imagine that they taste the delicacies of love in a degree which but little accords with the tenderness of their constitution. These are easily to be deceived by women who offer plea-

* *Journal de Médecine.* April 1757.

sure for *sale*. After the first advances; a man inexperienced in love, and who burns with desire to re-kindle sensations so voluptuous, often becomes the dupe of amorous management, and of the artifices in use among courtesans. He cannot suppose that sighs and *forced* extasies, are any thing else than the sensible effect of pleasure excited by himself; he redoubles his endeavours to participate in those transports: but illusion supplies the place of reality; he believes himself indebted to love for the delicacies which they persuade him he has tasted, while these delicacies are no more than the effect of a seductive and sterile art, in which all is fascination and hypocrisy.... How many men believe they have enjoyed the last favours of such women of *fashion*, and who nevertheless deceive themselves!

Among the men whom vanity has caused to speak, we may place the Emperor Proculus; since, in writing to his friend Metianus, he would persuade him that, having taken prisoners a hundred Sarmatian damsels, he had metamorphosed them all into women, within fifteen days. It must be observed, for augmenting the Emperor's glory, that these damsels were virgins

when they fell into his hands*. Crucius has left us the history of a male domestic, who, in the course of one night, not only slept with ten servant girls, but, at the same time, rendered them all fecund. We must not forget the adventure of Hercules, who, having slept, during twelve or fourteen hours, with fifty Athenian damsels, procured a son by each of them; and these children were afterwards called *Theſpiades* †.

Venette, calculating in general the power of men, limits their exploits to the number of five for one night; and it is truly sufficient: it is even too much for all men, many of whom I would advise not to regulate themselves by this tarif. When I spoke of the Temperaments, it was pretty accurately shewn what vigour we ought to accord to each constitution: it is not impossible, for the man of a bilious

* PROCULUS METIANO S. P. D. *Centum ex Sarmatia Virgines capi; ex his, una nocte decem iniri; omnes tamen, quod in me erat, mulieres intra dies XV reddidi.*

† *Tableau de l'Amour Conjugal.* Part II. c.v. art. 2.

temperament

temperament to surpass the number of five embraces during one night; but it is certainly beyond the power of a phlegmatic man to attain that number.

Many circumstances, independent of temperament, have a great influence on our pleasures: we experience more vigour in the presence of a beautiful woman, who is the sole object of our affections, than with another, who is inferior to her in loveliness. A man will be more incited by pleasure, in the embraces of a fair-one whom Nature has favoured with those *nothings* which call on, facilitate, retard, and accelerate the instant of enjoyment. We have elsewhere seen, that the aliments, the season, the climate, &c. are likewise agents capable of multiplying in us the sources of pleasure, and consequently of favouring the act to which those pleasures refer.

Blameable, then, was the conduct of some Legislators, who endeavoured to limit an action by law, which owns no other dominion than that of Nature. Was this properly understood by Solon, that oracle of Greece, when he prescribed to his citizens, That they should

not approach their wives more than three times a month? The Rabbies, who had nothing in view, except the conservation of the Jewish people, stated the duty which a peasant ought to render his wife, at one night in the week; that of a tradesman or carrier, at one night in the month; that of a waterman, at two nights in the year; and that of a literary man, at one night in two years. We may perceive, that there would be a variety of reflections to make on this subject, if the prescribed tariff was rigorously followed; but an exact conformity to these regulations, on the part of the men for whom they were made, is opposed by many circumstances: age, temperament, climate, speak more powerfully than human laws.

The influence of marriage on health, likewise depends on the quality of pleasure, if I may thus express myself. Conjugal duty will make less impression on tranquil spouses, than on those whose every sense partake of enjoyment. Lascivious persons still retain, in their eyes, the sparks of the torch of Love, after it has kindled their pleasures; and we find spouses, on the contrary, whose inactive enjoyments do not leave on them any impression
by

by the aid of which we might divine their happiness.

We also observe, that the transports in which women have indulged, are easier to be divined than those of men: is then the pleasure greater which they enjoy, since traces of it remain, when it is passed? This question, so often agitated, and resolved with such little uniformity, is alone to be decided by a being who should be able to unite in himself the advantages which distinguish the sexes. Antiquity gives us the judgment of Tiresias, who, having been both man and woman, pronounced for Jupiter against Juno, that women experience more pleasure in love than men. From the names of those interested in this dispute, it will be perceived, that the incident is of a fabulous nature; and thus the judgment of Tiresias may be considered as exceptionable. If we particularly direct our enquiries, in this regard, to men and to women, we shall discover that the opposite sex to each of them is most favoured by Nature; according to the reason adduced in the proverb, *That a man always finds the harvest of his neighbour more beautiful than his own.*

There is nothing determinate respecting this object. Anatomists demonstrate that, from the structure of the parts necessary for generation, men are most favoured in the act which is occasioned by those parts. Indeed, the long vessels, folded so many times on each other, and through which the seminal liquor is compelled to take its course, for the purpose of discharging itself, present advantages which are not discoverable in women: the quality of this seminal humour, much more spirituous, must more voluptuously affect these same vessels which it is obliged to pass; and the delicate structure of the organ necessary for the transmission of this liquor, must likewise augment sensibility in those moments of intoxication. These are our advantages. Women, as we have seen, do not possess so many, in this respect, as men; but the delicacy of their constitution, and even their weakness, procure them some benefits of which men are deprived. The parts which concur to excite voluptuousness, are more numerous than in men; and the agitation of some of these, suffice for communicating sensation to all the others. One part, in particular, is endowed with exquisite sensibility, (of which I shall speak

speak in the succeeding Chapter) and is the seat of pleasure in women.

Imagination operates more forcibly on women than men, as well in sorrow as in joy: their nervous disposition is more susceptible of impressions; and if struck with vivacity, it preserves a longer duration under certain circumstances. We may also say that enjoyment, with women, has more extensive *relations* than by us.

It is not easy to account for the erotic fury of some women, whose impudicity is related to us in history. The infamous Cleopatra, having assumed the name of a celebrated courtesan of Rome, repaired to a place of debauchery; and sustained, says Venette, in less than twenty-four hours, five and twenty encounters more than the said courtesan, who had been esteemed matchless in love; and, after that, Cleopatra declared that she was not entirely fatiated. The shameless Messalina endured, in one night, the amorous efforts of one hundred and six men, without shewing any signs of fatigue. If we do not regard these relations as fabulous, it must be admitted, that ostentation,

tation, rather than pleasure, gave birth to those singular debauches. We have found women whose amorous fury could not be appeased than by the caresses of several men; but, after what I have said, it will readily be acknowledged, that such acts must exhaust the sources of pleasure, and drag dolor, or at least indifference, in their train.

‘All enjoyments are not alike,’ says Montagne: ‘there are consumptive and languishing enjoyments.’ It is therefore impossible to set any bounds to that pleasure which reunites the sexes, or to decide on which it has the most influence. Both the man and the woman enjoy their advantages; and the former, whose pleasure is so vivid, does not conceive himself to have been neglected by Nature, although the latter appears to experience for a longer time the voluptuous impression in which he has participated.

An English lady took such great offence, on hearing it observed that women had at least as much pleasure in love as men, that she made a vow of virginity for her whole life: she avoided the men with incredible obstinacy, persevered in this caprice till her eightieth year, and

and then died as she had lived. She left a will behind her, in which all the legacies were allotted for young virgins. Her system was, to prove that the disproportion of the two sexes, in the pleasures of love, is at least as that of 40 to 83*.

* *Essais historiques & philosophiques sur les principaux ridicules des différentes Nations.* Chap. IX.

CHAP. II.

ON THE PARTS OF MAN,

WHICH

SERVE TO GENERATION.

‘ WE shall endeavour to enter
 ‘ into these details with that sage reserve which
 ‘ forms the decency of stile; and present them
 ‘ as they have appeared to ourselves, with that
 ‘ philosophic indifference, which banishes all
 ‘ sentiment in expression, leaving alone to words
 ‘ their simple signification. *’

As soon as men observe a phenomenon,
 they hasten to discover the explication. Cu-

* *Histoire Naturelle, &c. par M. de Buffon.*
 Tom. IV,

riosity

riosity exercises itself on all that 'appears contrary to the ordinary course of Nature; while things more immediately subjected to our senses are, for the most part, neglected. Nothing, without doubt, is more common than the use of the parts which concur to generation; and nothing perhaps which is less known to the generality of men, than the structure of those same parts. We enjoy the pleasure which they procure us, without wishing to search for the cause in their organisation. But, if this motive cannot excite the curiosity of some persons, there is one, nevertheless, of greater importance: it is, the satisfaction of being able to account for the diseases which sometimes afflict these delicate parts, and also that of distinguishing certain defects, which may oppose the happiness to which all men ought to aspire — that of being fathers.

The generality of Anatomists distinguish the organs of man that serve to generation, in three classes, with regard to their different functions. The first comprehends those which separate the prolific liquor: under the second are included those which conserve it for some time, and serve as a reservoir; and, lastly, the
third

third comprehends the organs destined to transmit this liquor to the place adapted for generation. The organs in the first class, are the *testicles*; those of the second, the *seminal vesicles*; and in the third class are comprised all the parts which compose the *penis*.

This division is particularly adapted to persons who follow Anatomy in general: for confining myself to what has most relation to my object, I shall divide these parts into external and internal. The first are apparent; and the others concealed in the capacity of the abdomen, or lower belly.

The part which distinguishes the man from the woman, presents itself first in the division which I have proposed to follow. It would be as inutile as indecent to mention all the names which it has received, particularly in the French language. Anatomists call it the *virile member*, or *penis*; and I do not know that it can be otherwise denominated without offending modesty*.

* The Latins gave this part an infinity of names: they called it *Penis*, *Hasta*, *Muto*, *Verpa*, *Mentula*, *Priapus*, *Caulis*, *Virga*, *Fascinus*. The ancient French

It is well known that the ancients deified this part under the name of *Priapus*. The Egyptian ladies wore it as a relic, at the feasts consecrated to Bacchus. The Greeks had a model of this part, of an enormous size, which they carried in state; and, according to St. Augustine, the most honourable matron of the procession was obliged to place a wreath on this effigy, before all the spectators. The inhabitants of *Panuco*, in the northern parts of America, exposed a similar figure in their Temples; and the homage which they rendered it, cannot be described than by impurity itself*.

French romance-writers, less delicate than their successors, spoke of it under several names, which offended no person. The signification was well known of *Lance virile*, *Pistolet d'amour*, *Gaudisseur de la maison*, *Médiateur de la paix*, *Cultivateur du champ de Nature*. We also find many less honourable names given to this part in the Works of Rabelais, *le Moyen de parvenir*, *le Dictionnaire comique, satyrique*, of *le Rous*, &c.

* We find, in a small work attributed to Lamotte la Vayer, entitled *Hexameron rustique, ou les six journées passées à la campagne entre des personnes studieuses*, a dissertation on the parts called shameful in man and woman, in which are collected the different

The Phœnicians, also, made processions in honour of *Belphegor*, their ido ; and the High Priest, walking fiercely at the head of his clergy, held the manly part in his hand, and lowered it before the idol, as a mark of homage. The Rabbies say, that the Hebrews, for affirming an oath, laid the hand on that part where circumcision was practised*.

The Monks of *Gomeron*, dependant on Persia, are subjected to a singular proof, and by which the people judge of their devotion. These idolatrous Priests have the parts of generation uncovered: these are kissed by the women; when, on shewing any signs of sensibility, they fall into disgrace†.

In *Deuteronomy*, these parts have a respectable appellation, [*Veneranda*]; and if a woman happened to lay hold of them in anger,

ent adorations paid to these parts by the Pagans. Riolan, *anthopographiæ*, lib. II. cap. xxx. may also be consulted

* *Essays Historiques sur Paris*. Tom.V.

† *Abregé de la Collection des Voyages*, &c. Tom. VI.

the law stated that the offending hand should be cut off*. Villandry committed an offence against Majesty, by extending his hand to the private parts of Charles IX.¹ who, jokingly, had squeezed him by the throat: and d'Aubigne asserts, that he would have been put to death, if the Admiral de Chatillon had not obtained a pardon for him, after the failure of a similar application made by the two Queens and the Duke of Montpensier†. The Caffrees exult, when they have cut off, in war, a great many virile members of their enemies: they make presents of them to their wives, who convert those spoils into collars for the neck, and which serve to flatter their vanity.

These circumstances are sufficient for giving an idea of the consideration which the private parts of man enjoy among some people. Having thus seen, so to express myself, their moral history, I shall next examine their structure.

The *Penis*, [1, Pl. IV. fig. 1.] is a round

* *Deut.* Chap. XXV.

† *Aubigné.* Tom. II.

and long body, situated at the inferior part of the lower belly; it is attached and adheres to the roots of the *os pubis*. The parts which compose the *penis*, may be distinguished, with regard to their situation, by containers and inclosers. The first are the *skin*, the *cellular web* that is remarked under it, [o, o, o, o, Pl. V.] and a particular membrane, which seems to be formed by the sprouting of a ligament that fastens the *penis* to the *os pubis*, and which is called the *supporter* of the *penis*. The skin which again covers this part, has a reduplication to its extremity; and it is this reduplication that we name the *prepuce*, [2, Pl. IV. fig. 11]: it is fastened to the under part of the *gland* [3, Pl. IV. fig. 1. 4, Pl. V.] by a ligament called the *frænum*, or *filament* of the penis.

The inclosing parts, are the two *cavernous bodies*, [1, 1, Pl. V.] the *urethra*, [3, 2, 3, Pl. V.] and the *gland*, [3, Pl. IV. 4, Pl. V.]; to which must be joined the muscles, of which I shall presently speak.

The skin which covers the penis is much finer than that on other parts; and this gives the penis an extreme sensibility. We observe,
that

that fat there is not in super-abundance; and it was necessary that it should not be so, in order to facilitate erection, that this part might be more susceptible of durity, and also to prevent the exquisite feeling, which there resides, from being deadened during the friction that occasions pleasure. In vain would Nature have distributed to the penis that considerable quantity of vessels and nerves, which there ramify themselves, [5, 5, 5, 5, 6, 6, 6, 6, Pl. V] if the sensibility that they impart, were liable to be suppressed by a greasy humour.

The gland is the most sensible of all the parts which serve, in man, to generation: it is the only firm dependance of the penis; is smooth and soft, that it might not wound the female in the union of the sexes; and the figure in which it terminates, renders facile its introduction into the place which Nature has destined to generation.

We may regard the cavernous bodies as two pipes or conduits, that take their origin on each side the branch of the *ischium*, and extend themselves to the lower part of the *os pubis*, where these two bodies unite with each

D 2

other;

other, for forming no more than one, which terminates at the posterior part of the gland. The cavernous bodies compose the greatest and most considerable part of the penis. We there observe two grooves; the lowest of which receives the greatest part of the *urethra*, and the highest, much less considerable, receives a great vein and two arteries, called the *pudenda*, [5, 5, Pl. VI.]. Nearly all the substance of the cavernous bodies is spongy and cellular; and two arteries, sufficiently great, penetrate those bodies, spreading on each side an infinity of branches, which lodge the blood in these parts. I shall elsewhere shew the importance of these cavernous bodies, in contributing to generation; for the present it is sufficient to say, that the tension of the penis is caused by the blood and the spirits which flow at the instance of the arteries and nerves into the innumerable cavities composing these cavernous bodies.

The *urethra* is a long and curved canal, that commences at the neck of the bladder, [7, Pl. V.] and ends at the extremity of the gland, [9, Pl. V.]. The commencement of this conduit is embraced by the *prostate* gland, [8, 8, Pl. V.]. The interior part of the
urethra

urethra is very glossy and smooth: we remark in it several orifices, that are the conduits of the lower *prostates*, and those of several other glands that furnish a mucilaginous humour, of which I shall speak hereafter.

Besides the ligament of which I have spoken, that strongly ties the penis to the *os pubis*, and affords it great assistance, not alone during erection, but likewise when it is soft and relaxed, the penis has six muscles, three on each side; namely, two *erectores*, [2, 2, Pl. VI.]; two *acceleratores*; and two *transversales*. They take their denomination from their use: the first aid the erection of the penis, when the cavernous bodies extend themselves; the second facilitate the emission of the seed, while, being shortened, they compress the seminal vesicles, and oblige the liquor there contained to enter the urethra, from whence it issues with impetuosity: and the third dilate, in their operation, the conduit of the urethra, for facilitating the passage of the urine, or the seed*.

* I deemed it improper to surcharge this Chapter with things that might have appeared as calculated

The length of the penis is commonly of eight or nine fingers breadth, and its thickness about that of three fingers, when, says M. Dionis, it is adapted to the demands of the fair-sex*. But we cannot precisely determine this length or this thickness; and they afford no strong inductions for drawing consequences on formidable or trifling talents in love. It is even asserted, that men, in whom the penis

to make a display of anatomical knowledge. The muscles in question, have yet complicated names, which I shall be excused from giving; such as the *Bulbo-cavernosa*, &c. by which is meant the *acceleratores*. I have not spoken of the binding and insertion of these muscles, nor of the names of the nerves and vessels that are distributed to the parts of generation. In saying that the nerves of the penis detach themselves from the pairs of the *sacra*, and the pairs of the *lumbares*; that the arteries are furnished by the *cruralis*, the *hypogastrics*, &c. I should only have been understood by men versed in anatomy; and, to have made others comprehend, it had been necessary to mount insensibly to the sources, and to have given an anatomical exposition of the human body. I have thus omitted, in the Plates, certain parts that were foreign to the object of which I treat.

* *L' Anatomie de l'Homme.* Demonstration IV.

exceeds

exceeds the ordinary limits of Nature, are not so *comfortable* in bed as the others. It is however certain, that many marriages are sterile, although the man gives, by a good conformation, the highest ideas of his capability.

Platerus relates the history of two women, whom the Judges declared at liberty to quit their husbands, in consequence of a complaint which they exhibited against them, stating a too great disproportion between the parts that denote the sexes. We also find several other observations, which prove, that some men were unable to accept the favours of Love, by enjoying too great a portion of the bounties of Nature.

The smallness of the part which essentially distinguishes the man, is no obstacle to generation, when this part does not offend in any other manner than by its size. This defect is not so great as that of the urethra, when this canal is formed so as to oppose the prompt and direct ejaculation of the seminal liquor. Sometimes this canal has only a wrong direction, because the *frenum*, of which I have spoken, pulls the penis violently during erection, and

gives it the shape of an arch. If the man cannot overcome this obstacle, he must apply for surgical assistance: the operation that remedies this inconvenience, is very trifling; by cutting the *frenum*, the part then assumes its natural direction *.

We have elsewhere seen †, that the state of the prepuce likewise favours or opposes generation, and sometimes amorous enjoyments. Its excessive length causes sterility, because the seed cannot be transmitted to the matrice, by reason of the frictions that weaken the impulsion which the muscles have given to this liquor. The surgeon may also remove this defect, by cutting that redundant part from the prepuce. If this covering offends by the contrary defect, but without contracting the penis, that person is then in the situation of circum-

* It is also certain that, in first enjoyments, the *frenum* of the penis may break; but nothing more will from thence result than a slight hemorrhage, which will stop on applying a bandage of fine linen to the part, and by postponing the complement of pleasure till another time.

† Volume I. Chap. VI.

cised

cised men, of whom I shall speak in another place: perhaps they lose something of pleasure, but are by no means less capable of multiplying the species.

These two states of the penis, with relation to the prepuce, are two ailments that demand all the attention of professional men, when, in the one or the other circumstance, this part is pinched or too tightly fastened in its envelope. The first of these complaints is called *paraphymosis*, an accident in which the prepuce is so reversed and so swelled, that it cannot be drawn over the gland. I shall not speak of those foreign causes that may occasion the paraphymosis, such as venereal diseases, but that cause alone which is most common. Newly-married persons, and those in whom the gland has never been liberated from the prepuce than with difficulty, are easily attacked with this ailment, when they summon their efforts for opening the course of pleasure. The means of remedying this complaint, and which ought not, on any account, to be neglected, is to bathe the part in cold water, in order that the swelling may abate, so as to bring the prepuce afterwards adroitly over the gland. If this does not succeed,

ceed, recourse must be had, as soon as possible, to an operation, which consists in loosening the prepuce, by making as many small incisions as may be requisite, for leaving it at liberty to fall over the gland.

The defect opposite to the one preceding, is the *phymosis*. We must sometimes have recourse to an operation, for preventing dangerous consequences, when it is occasioned by the venereal virus: but the natural phymosis, with which we come into the world, is not formidable, except when, through the acrimony of the urine, an inflammation ensues. When it resists the usual remedies, circumcision must be adopted: this consists in flitting the prepuce, to oppose the ravages which it would make on the gland by its too great constriction.

Men who, from the structure of the penis, may have reason to fear either the one or the other of these ailments; those, even, who do not believe themselves exposed to such inconveniences; in a word, every man, ought to pay the greatest attention to cleanliness in the external parts of generation, by washing them frequently. The sebaceous glands, situated on
the

the gland, furnish a humour that, in thickening, forms a foulness between the prepuce and the gland. This humour sometimes turns to corruption, and thus imposes on many persons, who imagining themselves to be attacked with a virulent gonorrhea, have recourse to empirics, and these profit by the credulity of such men for exercising their deceptions. Cleanliness will prevent this misfortune.

Some singular varieties have been remarked in the penis.

An Italian had this part thickly covered with very hard horns and nails*. The man known in England under the name of the *Porcupine-man*, was covered all over, except the head, the palms of the hands, and the soles of the feet, with bristles that had the consistence of horn: they were about half an inch long, and very thick; and stood perpendicular, like those of a hedge-hog. This man won the affections of a damsel, and became her husband. In this marriage he had six children, as well

* *Journ. Encyclop.* April 1764.

daughters

daughters as sons, all constituted as himself, and equally covered with a horny substance. It must be supposed that this species of savage, for labouring to generation, chose the time when no obstacle could oppose itself to his pleasures: every autumn, the hard bodies which fortified the penis, and other parts, fell off*.

A woman in Germany, having been familiar with a Negro, was delivered of an infant which was white in every part, except the penis†. There have been men in whom this part was double§.

Fribe says, that he knew a man whose penis had no opening at the extremity of the gland, but it appeared under that part. The Author adds, that this difformity did not prevent his having several children‡.

* *Mélanges d'Histoire Naturelle, par M. Allouin Dulac.* Tom. III.

† *Bibliothèque de Médecine, &c.* Tom. XV.

§ *Dictionnaire raisonné d'Anatomie & de Physiologie, art. Verge.* See also *Anatomia Bartholiniana*, lib. I. cap. XXIV.

‡ *Ephémérides d'Allemagne.* Dec. I. ann. 3. obs. 98.

For the remainder, we sometimes find individuals whose penis is not perforated when they come into the world: in this case, recourse must be had to Chirurgery, for repairing the defect of conformation without delay.

Having considered the part which essentially distinguishes the man, we come next to the *Testicles*, thus named from the Latin word *testes*, which signifies Evidences, because, in reality, they shew the strength and the vigour of man. They are also called *Didimes*, that is to say Twins, there being nearly always two. Men have been seen, who have had three, and even four; and others, whom Nature had reduced to one only. It must not, however, be supposed that the first were champions in love: the prolific liquor, divided into several organs, lost much of its activity; and observations confirm, that men who seem to be so well provided, do not always enjoy the satisfaction of becoming fathers. It is otherwise with those who happen to have no more than one testicle; I have known some of these who were exceedingly fecund, and to whom (which is of importance to observe, as will hereafter be seen) individuals of both sexes owe their birth.

We

We define the testicles, the glandulous bodies inclosed in the *scrotum*, a species of bag, [4, 4, Pl. IV. fig. 1.] and ordinarily situated below the abdomen. I say ordinarily, for we sometimes meet with persons who have these organs concealed in the lower belly; and those individuals are much more inclined to the pleasures of love than others*. It, moreover, frequently happens to infants, that these parts remain fixed in their passage; and sometimes they do not fall into the *scrotum*, [4, 4, Pl. IV. fig. 1.] than till the time of puberty, of which I shall further speak in a succeeding Chapter. The figure of the testicles is oval, a little flattish on each of the two sides, [1, 1, Pl. VI.]: their bulk differs according to ages; they are very small till the age of puberty, but then they augment in size, and acquire that of a small hen's or a large pigeon's egg, [1, Pl. VII. 5, Pl. VIII. & IX.]: the right testicle is nearly always somewhat larger than the left.

* The inclosed testicles, by rendering the seed abundantly more vivid, continually irritate the organs of voluptuousness: but this liquor also cannot be much disposed to fecundity, since it is not allowed time to attain a state of sufficient perfection.

We

We further consider, with these parts, their integuments. The first is the *scrotum*; and this is no more than a continuation of the skin, divided in two parts by a projecting line, in the shape of a suture, which Anatomists have named *rapha*, [5, Pl. IV. fig. 1.]: it commences at the gland, (where it is called the *frenum*, or *bridle*) and terminates at the anus. The *scrotum*, inside, is lined with a membranous flesh, which may be regarded as a real cutaneous muscle: this muscle is called *dartos*; and it furnishes a particular integument to each testicle: between the sloping or union of these two fleshy integuments, a partition is formed, that separates the two parts of the cavity which makes the *scrotum*. The *dartos*, as I have already observed, may be regarded as a muscle; and to its contraction must be attributed the wrinkles and the tightness of the *scrotum*. We may judge of the health and vigour of a man, when the action of this muscle presses the testicles, and appears to make them ascend*.

* There are some European people, who, in bargaining for negroes, observe with as much attention as indecency the state of the testicles in those slaves that are for sale. They judge of the strength or the weakness

The other particular integuments of the testicles, are three in number. The first is called *Vaginalis*, [1, 1, 1, Pl. VIII.]: it not only covers all the particular vessels of the testicles, by closely fastening itself to them, but even their body: this integument is again covered, in part, through the expansion of a muscle named *cremaster*, which suspends the testicles, and raises them in the act of generation*. Under the *tunica vaginalis*, we remark another, to which the name *peritestes* has been given: it is a bag which envelopes the testicle on every side. Lastly, the third membrane belonging to this part, and which immediately touches its substance, is the *albuginea*, thus named by reason of its colour.

weakness of those wretched beings, by these parts, according as they are more or less removed from the belly.

* It may, perhaps, be needless to inform the reader that, in the Plates which shew the different parts of the testicle, those parts are so prepared as to leave a view of such as they again cover in the natural state. The testicle must be supposed to have been dissected when the drawing of it was made.

No sooner is an incision made in this last tunicle, than we discover the substance of the testicle, which is white, soft, and loose, because it is composed of an infinity of very fine vessels, that perceptibly leave behind the colour of the fluid contained in them. These particular vessels are called the *spermatic* arteries, the *spermatic* veins, the *lymphatic* veins, the nerves, the *secretory* and *excretory* vessels; in short, the whole substance of the testicles is no other than a web or knot of an infinity of small vessels, the structure of which is astonishing*. These vessels have their contour in different manners, and form several bundles, supported by membranous partitions. On the upper-side of the testicle, we perceive a long body, the figure of which nearly resembles that of a caterpillar. It is called *epididymis*, on account of its situation. [1, 2, Pl. IX; 2, Pl. VIII. 2, Pl. VII.]

* The anatomical preparation proves, by a simple calculation, that the whole substance of an ordinary testicle would furnish a thread of three hundred miles in length.

The substance of this part is the same as that of the testicle; and the vessels of which it is composed, make an infinity of serpentine contours, [3, 4, 5, Pl. VII]: the *epididymis* terminates at the extremities by two eminences, the most considerable of which [1, Pl. IX.] is named the Head of the *epididymis*, and the smallest [2, Pl. IX.] is called the Tail. At this last commences, on each side, the *vasa deferentia*. [3, 4, Pl. VIII. and IX.]

The use of the testicles is to filtrate the seminal liquor, and to separate the blood from it, as will elsewhere be shewn: that of the *epididymis* is to receive it immediately from the testicles, for transmitting it to the seminal vesicles by the deferent canals.

The *seminal vesicles* [1, 1, Pl. X.] are two membranous and cellular reservoirs, situated at the posterior and inferior part of the bladder, [4, Pl. X. 10, Pl. V.]. Their ordinary length is three fingers breadth, and their broadest part about an inch: this broadest part is called the Bottom; and the narrowest the Neck, to which is continued a particular conduit called the *ejaculator*.

We may see, [2, 2, Pl. X.] the deferent conduits that transmit the seed of the *epididymis* to the seminal vesicles. The ejaculatory conduits are two small vessels that empty themselves in the urethra, nearly at the neck of the bladder, after having traversed a glandulous body, sufficiently firm, that embraces the neck of the bladder and the commencement of the urethra. This glandulous body is known under the name of *prostatæ*. [3, Pl X. 8, 8; Pl. V.]. It is formed through the assemblage of several other glands, whose exterior orifices, to the number of ten or twelve, open before an eminence named *veru - montanum*. The use of the prostates is to separate a soft and oily humour, nearly resembling the seed, which lies in the canal of the urethra, and mixing with the seed in its ejaculation, serves it as a vehicle, impedes the dissipation of its spirituous parts, and preserves the urethra from the acrimony of the urine.

Having described the parts which, in man, immediately concur to generation, it is necessary, for rendering perfect the idea which ought to be formed of this subject, to shew their

E 2 functions;

functions, and the mechanism by which those functions are performed.

It is known that the feminal humour, as I have already observed, is contained in the blood, like all the fluids which carry nourishment and feeling into our parts. When Nature, at the age of puberty, in perfecting her work, disposes us to be capable of multiplying the species, she prepares the concurring organs to filtrate the seed, and to transmit it outwardly. The testicles begin this operation. The arteries and spermatic veins [3, 3, 4, 4, Pl. VI.] in uniting themselves to the nerves of the testicles and to the deferent conduits, enveloped in the *tunica vaginalis*, form a cordon named the *cordon of the spermatic vessels*, [6, 6, Pl. VI.] that reaches to the testicles, [1, 1, Pl. VI.]. It is this cordon that conveys with the blood the matter of the seed, and that returns it, separated, to the feminal vesicles. Let us examine how this filtration is effected; an operation so highly interesting, since the conservation of the human species depends on it.

Before the spermatic artery penetrates the testicle, it divides in several branches, which
are

are again subdivided into an infinity of others, [2, 3, 4, 4, Pl. VI.]: the blood which they contain, meets, in the substance of the testicle, [5, Pl. IX. 5, Pl. VIII.] that prodigious number of small vessels, of which I have spoken, folded on themselves, and collected in bundles. These vessels, very delicate and very long, [6, 6, 6, Pl. VIII. and IX.] take from the blood which every small artery offers them, the finest, the most subtile, and the most spirituous parts.

This filtrated liquor is the matter of the seed, which must necessarily flow through this astonishing multitude of circumvolutions of the small vessels for becoming prolific: it is not entirely perfect, after remaining a long time in the testicles; it must pass into the part which is named *epididymis*, for there acquiring a further degree of preparation. From thence, it runs through the deferent canal, [7, 7, Pl. VI.] which deposits it in the seminal vesicles; and after it has there sojourned for some time, it then receives all the qualities that must render it actually prolific. Here the spermatic vessels, as every where else, re-admit the blood which has furnished the seminal liquor; and all their divisions re-uniting by degrees, they form a sin-

gle vessel on each side, that again conveys the blood into the most considerable veins, for conducting it successively to the heart, and, after being there impregnated with new spirits, to re-assume its course of circulation.

After this short exposition of the manner in which the seed is prepared, will that be considered as ill founded which I have advanced of pretended secrets, of those recipes extolled by empiricism, for plunging man into a torrent of pleasures? We see how tardy Nature is in the *spermatical* operation, and in the coction of the seed: is it, then, to be supposed, that the laws of the animal economy are to be changed by means of aphrodisiacs? that those innumerable vessels, through which the seed must take its course, will suddenly acquire a supernatural movement, so as to expel, in a prompt manner, the fluid which they must prepare? If obscene books, and lascivious images of debauchery, irritate the organs of generation, and provoke to enjoyment, it is because the seminal vesicles contain a sufficiency of the prolific liquor for aiding the impressions made by these seducing objects; without which, such voluptuous spectacles would not produce any effect.

effect. Let a man who has given scope to the excitements of his imagination, have recourse, the following day, to every means recommended by persons who give credit to the sovereign virtues of aphrodisiacs; and he will then see if Nature is to be commanded. Could the farmer, when he has cut down the harvest of his field, gracefully demand of it a second crop in a short time afterwards? He must wait till the earth has regained its strength, if I may so express myself: let him cultivate it; let him repair its losses: but Nature will not derange the order of the seasons for satisfying the avidity of men.

I have left the seed in the seminal vesicles, where it must be perfected, before its outward transmission, in part, occurs: I say in part, because a portion of this humour must actually re-pass into the mass of blood, through the fine and tender vessels that have a communication with the vesicles. The changes which it makes in us at the age of puberty, demonstrate the necessity of this resorption of one part of the seminal fluid.

When this fluid has acquired all the perfection of which it is susceptible, it strives to obtain a passage outwardly; and the sign that announces this want is, the involuntary intumescence of the penis. The blood, being impregnated with spirits, and conveyed into this part by the arteries which there discharge themselves, is the cause of that intumescence. This blood swells the cavernous body, because the veins being too small to contain all which the arteries furnish, a part of the blood introduces itself into the cavities which I have observed in these spongy bodies. All concurs, in these circumstances, to augment the action of the muscles named *erectores*, and consequently to support the penis in its erection.

The feminal vesicles, partly composed of muscular fibres, and therefore susceptible of contraction, are pressed on every part, as well by the liquor which they contain, and that searches to escape, as by other circumstances exciting erection. The *sphincter* of the bladder furnishes a fixed point of reliance, against which the seed can make no other than inutile efforts: the orifice that leads to the deferent canal, shuts itself through the disposition of the
the

the *valvule* which is found there; thus the fluid, pressed on all sides, except towards the orifice of the ejaculatory canal, destined to carry this fluid into the urethra, [5, Pl. X.] enters that canal with violence. The musculous membrane of the *prostatæ* then contracts, and the humour which it contains, being expressed from thence, prepares the urethra for the passage of the seed. These two fluids mix in the part of the canal which the transversal muscles have dilated; but this dilatation is only instantaneous; for the *acceleratores*, being contracted, press on the seed which is lodged in the urethra, and cast it to a greater or a smaller distance, in proportion as the tension of the penis is more or less strong, and to the quantity of fluid that is to be evacuated.

This is the pure mechanical explication of the emission of the seed, and the manner in which it happens when caused by too great a fulness of the feminal vesicles.

This involuntary emission has sometimes place among men who are subject to a constipation, when the matter of the stool cannot be otherwise evacuated than by redoubled efforts.

To

To occasion this, erection is not even necessary; while, from the situation of the feminal vesicles, and that of the internal *rectum*, the liquor which they contain becomes pressed; it penetrates the canal of the urethra, and is transmitted outwards without the smallest force.

That which passes during sleep, is not altogether so strictly mechanical as in the circumstance here under consideration. The same agents operate in the emission of the feminal liquor; but they are excited by voluptuous ideas, that offer seducing pictures to the imagination. It would be in vain if I strove to explicate the manner in which the soul operates on the senses, when those appear inaccessible to the impressions of exterior objects. It is more easy to communicate that which results, in those delicate moments, from the empire of imagination on the body, than solely to expose one part of what the builders of systems have advanced, for persuading us that they know the laws by which the spiritual substance acts on the matter.

It must be confessed, that the feminal vesicles, swelled by the fluid which they contain,
easily

easily discharge themselves; and that they are more disposed thereto, when imagination contributes to this plenitude. But how does imagination operate during sleep? Ah! how does it operate during study? Shall I demand this of men who would assimilate all physiological phenomena to the laws alone which render our organs independant of a spiritual substance, emanating from the Creator?

When the feminal vesicles are filled with the liquor to which they serve as reservoirs, like the other receptacles of our body, they tend to disburden themselves, (even in men whose imagination is the least inclined to voluptuousness) if this liquor is so abundant, that it cannot be resorbed by the spermatic veins. It is thus that tears, filtrated by the lachrymary gland, take their course through the nasal canal, if they cannot find a passage through the lachrymal points. But pain, sorrow, and even joy, suffice for exciting tears.... I know it; and if any person will explicate to me the manner in which these passions act on the animal economy, I may likewise adduce a reason why the presence of certain objects, or even their image, produce on the reservoirs of the spermatic

spermatic liquor the same effect as certain passions on the glands destined to the secretion of the lachrymal humour.

Let us say of the secretions that, in general, when ‘ the *filter* is agreeably warned by the ‘ imagination, the secretion takes place, even ‘ before the time of its function : as the saliva ‘ that rises in the mouth, at the sight of a desirable aliment; or as that fluid, the expression of which is more attested still by its voluptuous presence *.’——

Such are the parts which, in man, concur to give being to an individual of his own species. I might have easily dwelt on each of these parts, and have shewn the precautions which Nature has taken, in order that they should discharge their functions in the best possible manner. The reader may see, on this subject, what has been written by Anatomists of the last century: I should, perhaps,

* *Traité Physiologique & Chymique sur la Nutrition.*

give

give dissatisfaction, by entering into those too prolix details *.

In the commencement of this Chapter, I shewed the extravagant modes of worship which certain people render to the parts of generation: I cannot, therefore, conclude it with more propriety, than by relating a circumstance which will evince, with less absurdity, the importance attached in all times to those organs that are adapted for the perpetuation of individuals, and the ardour with which women oppose themselves to a mutilation, that, without speaking of their interest, aims at the destruction of the species.

During the war in which the Grecians were engaged with the Duke of Benevent, the Marquis of Spoletta, his ally, commanded that the private parts of all those who fell into his hands, should be amputated. This order was

* Du Laurens, for example, demands, Why it is not a bone that forms the base of the penis? Why this part is not an artery? a vein? a nerve? &c. and he answers these inutile questions in a manner that is sometimes pleasant.

rigorously

rigorously executed, till a woman, whose husband had been made prisoner, threw herself at the feet of the General, and thus addressed him: ‘ Sir, I am astonished that a hero like
‘ you, can resolve to make war on the wo-
‘ men, when the men are not in a condition to
‘ offer resistance! — Is it possible to levy a
‘ more cruel war, than one which deprives our
‘ husbands of what gives us health, pleasure,
‘ and children? When you make Eunuchs
‘ of these unhappy men, it is not them, it is
‘ us, that you mutilate. You have carried off,
‘ within these few days, our cattle and our
‘ goods, without hearing any complaint on my
‘ part: but the loss of that benefit which you
‘ have taken from several of my companions,
‘ being irreparable, I could not do otherwise
‘ than implore the conqueror’s compassion.’

The simplicity of this woman made so great an impression on the whole army, that they liberated her husband. — As she was returning with him, the General caused her to be asked, what punishment she would have inflicted on him, in case they should find him again in arms? ‘ He has eyes,’ answered she;
‘ a nose, hands, feet! These are his advan-
‘ tages;

‘ tages, of which you may bereave him, should
‘ he merit it : but leave him, if you please,
‘ all which appertains to me *.’

* *Traité des Eunuques*. Part I. Chap. V.
V. M. Ancillon cites, in the place here quoted, the
Authors from whom he borrowed this singular anecdote ; which cannot fail of pleasing, when its artlessness is considered, and the plain-dealing so conspicuous in the remonstrances of the complaining wife.

CHAP. III.

ON THE PARTS OF WOMAN,

WHICH

SERVE TO GENERATION.

IT was not sufficient that Nature had given organs to man, that were capable of containing his posterity, or what tended to fertility; it ordained, also, that the woman should receive, in a secure place, those precious germs which multiply the species. Why need we continually search, out of ourselves, for motives of admiration and gratitude towards the Author of all things? If we fix our attention, for an instant, on the organs destined to generation, what a wonderful structure offers particularly in those of the woman! And
is

is their action less admirable than their structure ! No sooner has the prolific liquor penetrated the matrice, than this viscera, in closing itself, becomes an inaccessible place for all that is exterior to it : there the infant receives life, and there it grows ; nor does it come from thence, till the moment appointed by Nature for the birth of human beings. By what laws does she execute operations which are so surprising ? What are the reasons adduced by men, for explicating the most universal act of Nature, and which she has the most concealed from their eyes ? We ought not to enter into these details, than after an examination of the parts which contribute to reproduction. Let us, therefore, examine those of the woman, as we have those of the man in the preceding Chapter.

The ancients rendered no less honour to the *private parts* of women, than to those parts which characterise the man.

The Syracusans carried them with great ceremony to the celebrated *Thesmophoria*. All the time these sacrifices continued, it was customary to send each other, throughout the

whole of Sicily, presents of cake, made of meal and Oriental corn, that had exactly the figure of those parts which they would honour. The Romans, when their morals were depraved, had vases constructed, which they used during their repasts, and to which were given the shape of the part that they worshipped with so much passion*.

Leon, surnamed the *African*, asserts that, if a woman happens to rencounter a Lion when he is amorous, and more furious than at another time, that animal bows his head, and, roaring, pursues another route, if she uncovers to him that which distinguishes her from the man. This incident, which the reader may believe or discredit as he pleases, tended to give the Egyptians an idea that even their God took pleasure in beholding naked women: thus, during forty days, the Egyptian females presented themselves before their god *Apis* with elevated petticoats. It was also believed, among these people, that the spirit of Apollo entered, through the same parts, into the Sybils, when they deli-

* ~~—~~ *vitreo bibet ille Priapo.* Juv. Sat. 2.

vered the oracles. In all the places which Sesostris subjugated, the exterior parts of generation were represented on columns: those of the woman, when he had vanquished the enemy without much difficulty; and those of the man, when he had met a formidable opposition.

The venerable Father Alvarez informs us that, in Abyssinia, the young women, from motives of gallantry, wear ornaments in the form of little clocks, or bells, on their private parts, that hang and jingle at liberty. In several kingdoms of Africa, the women of the king, and of the principal courtiers, have these parts bored like the ears: there they fix several gold rings, and other trinkets, which those women are obliged to remove when their spouses approach them*. This luxury, which is extended to parts where it does not seem to be necessary, is not exclusively in use among distant nations: M. de Saintfoix tells us of a fashion that was introduced among ladies of the great world; *it was not solely the hair of their head, says this*

* *Hexaméron rustique.* III Journée.

agreeable writer, *which they decorated with ribbands of different colours**!

I shall divide the Parts of woman that serve to generation, with respect to their situation, into external and internal: the one are inclosed in the lower belly, and the other are placed on the outside of that capacity. The *penil*, *Mons Veneris*, the *great lips*, the *vulva*, the *fork*, the *fossa navicularis*, the *perinæum*, the *nymphæ*, the *clitoris*, the *meatus urinaris*, and the *orifice* of the *vagina*, are ranged in the first class. The internal parts are, the *vagina*, the *matrice* with its *vessels* and its *ligaments*, the *Falopian tubes*, and the *ovaria*.

The *penil* [1, Pl. XI.] is situated a little above the private part: it is somewhat elevated, because it is formed of fat; and it serves, according to Dionysius, as a small cushion, to prevent the hardness of the bone from wounding in the union of the sexes†.

* *Essais Historiques sur Paris*. Tom. V.

† *Anatomie de l'Homme*. Demonstration IV.

The *Mons Veneris*, or *Mount of Venus*, [2, Pl. XI.] to which the name of *hillock* has also been given, is situated immediately under the *penil*. Some Anatomists confound these two parts. They are provided with hair at the age of puberty. We observe that the hair of women is more frizzled than that of damsels. It will be easy to explicate this difference, in observing, that the circumstances which accompany the union of the sexes, must very frequently change the situation of the *bulbs*, from whence the hair proceeds. The Turks, and some other people, both men and women, have none of these filaments on the body, excepting the head and the beard; because they take care to destroy them, by means of a depilatory. There are other Nations where the people are naturally deprived of this hair, as will be seen in the Chapter on Puberty.

It is also supposed that strong inductions may be drawn of temperamental vigour, from the quantity of hair that covers the private parts of the sexes, and even by its colour. We also know, that, in some diseases, the body is entirely despoiled of its hair. It is a sin-

gular observation relating to a Polish woman, whose hair, on the secret parts, grew to an extraordinary length, in a disease known in Poland under the name of *plica*. It had grown to the length of more than a yard; so that it would have dragged on the ground, says the author of this observation, if the woman had not twisted it round her thighs*.

The German Ephemeris contains also an account of a woman residing at Munster, who, without having experienced any sickness, had on the private parts so considerable a quantity of hair, that it reached to her knees†. The author of this observation adds, that he knew a young man and a young woman, well conformed otherwise, who were deprived of hair on the parts of generation, and who never had had any children. The same observer says, that he knew another woman who, from her youth, had no other than white hair on the same parts, and who was always sterile§.

* See *la Collection Académique*. Tome III. p. 168.

† Dec. 2. An. 6. 1688.

§ *Idem*. Observat. XX.

The *great lips* [3, 3, Pl. XI.] are two folds formed by the skin: these parts are tolerably firm in girls who have had no intercourse with the other sex; but they become soft and loose in women who have borne many children. The hair that veils these parts is not so strong as that of the Mount of Venus.

The space contained between the two great lips, is what we name the *vulva*, or *great chink*, in order to distinguish it from the entrance of the neck of the matrice, which is called the *little chink*.

The two great lips, in uniting at their inferior part, form the *fork*, [4, Pl. XI.]: we there remark a membranous ligament that, as some Anatomists pretend, is found bent in maids, relaxed in those who have permitted the approach of the male, and nearly always torn in women who have had children. This ligament forms, conjointly with the internal part of the base of the great lips, a hollow which is called the *fossa navicularis*.

The *perinæum* is the space comprised between the *fork* and the *anus*. It diminishes
F 4 through

through frequent deliveries; and is destroyed, even, by those which are laborious. [5, Pl. XI.]

Immediately after the great lips, we discover two fleshy, soft, and spongy excrescences, called the *nymphæ*, [6, 6, Pl. XI.] because they preside over the water, and conduct out the urine. The figure of these parts is triangular; and they are larger in their inferior part than in the superior: their colour is red, particularly in young women, like the comb of a cock, which they also resemble in figure. Their size varies; for, in some women, it is necessary to cut away a part of them, for preventing difformity, and the obstacle which they offer to the pleasures of marriage*. This operation is named *Nymphotomia*: it is attended with some danger, if care be not taken to prevent the hemorrhage incidental to the amputation of these excessive crests. In Africa, where this excess is very common, there are men who exercise no other profession than the retrenchment of this superfluity, and who cry

* *Anatomy of Dionisius.* Demonstration IV.

along

along the streets, ‘ Who will be cut*?’ In some parts of Arabia and Persia, the *Nymphotomia* is ordered, by law, to girls, as is circumcision to boys: this operation takes place when the females have passed the age of puberty. But, among other people, as those of the river Benin, it is customary to circumcise the girls eight or nine days after their birth†.

Above the *nymphæ* is the *Clitoris*, [7, Pl. XI.]; it is a round and rather long body. Its composition exactly resembles the penis, [1, fig. 4, Pl. III.] there being no other difference than with relation to the urethra, which is deficient in the *clitoris*. [fig. 3 & 4, Pl. IV.] It has two cavernous bodies, a suspensory ligament, several vessels, two erec-tory muscles, a prepuce, and a gland, [6, 6, 7, 7, fig. 3 & 4, Pl. IV. 1, 2, fig. 4, Pl. III.] from whence it has been named the *penis of the woman*.

This part, endowed with exquisite feeling, is the principal seat of pleasure in women dur-

* *Dictionnaire de Chirurgie. Art. Nymphes.*

† *Hist. Nat. of M. de Buffon, tom. IV. Recherches sur les Américains, part IV. sect. IV.*

ing enjoyment; for which reason, it has obtained the name of *oestrum Veneris* — the sting of Venus. The *clitoris* is ordinarily small: it begins to make its appearance in girls at the age of puberty, [5, fig. 2, Pl. III.] and increases in proportion as they have a temperament more or less erotic. The smallest voluptuous titillation makes it swell, by means of the cavernous bodies, [3, 3, fig. 4, 1, 2, 3, fig. 3, Pl. III.]; and in the union of the sexes, it becomes erect, like the part which distinguishes the man. The largeness of the *clitoris*, which sometimes equals, and even surpasses, that of the penis, has impelled some women to abuse this part with others of their sex*. Vain, perhaps, of this species of re-

* *L'Onanisme*, art. 1. sect. V. Platerus says, that a woman had the *clitoris* as large as the neck of a goose; and Bartholinus asserts, that this part ossified in an Italian courtesan, who had abused it. Tulpius speaks of a woman, in whom the *clitoris* was very large, and who was publicly whipped, and banished perpetually, for having abused her conformation. It is well known to what point Sappho carried the passion for persons of her sex. The Roman ladies, at the epocha when all the morals were corrupted, richly merited the epigrams and the satires of the

femblance to man, says M. Tissot, imperfect women have been found, who scrupled not to seize on the virile functions. —

Often have these women been seen as violently in love with damsels, as the most impassioned men, and conceiving even the most lively jealousy of those who appeared to have affection for their favourites. For this reason, the *clitoris* has also been named, *the scorn of the men*.

This part, at least its extremity, may be amputated: it is even ordained as an act of Religion among certain people, of which I shall speak in the succeeding Chapter. Among us, there are circumstances, in which we might restore the health of many fair-ones, if we could deaden, in the *clitoris*, its too vivid feel-

the Poets: that with which Juvenal reproaches Laufella and Madulina, may be seen in his sixth Satire. Lucian, in his *Dialogues of Courtesans*, censures the same vice in the women of his time. Cœlius Aurelianus has named those women *Tribades*, who abused their *clitoris*. Plato marked them under the name of *subigatrices*: they have been called *fritatrices* by some others; and *ribaudes*, or *frotteuses*, by the French.

ing:

ing: it is the source of many private errors, which plunge those who commit them into the marasmus, and the other diseases which originate in voluptuousness*.

The *meatus urinarius*, [8, Pl. XI. 3, fig. 2, Pl. III.] situated below the *clitoris*, is, in women, the conduit of the urine: it is shorter, larger, and less curbed, than the urethra in men. The women, therefore, have a quicker discharge of urine; and we find also, in that structure, the reason why they are less subject to the stone than men. This conduit is environed with a *sphincter*, that serves to retain and to loosen the urine at pleasure; and we there observe also some glands, that, as the

* From this extreme sensibility, the *clitoris* has been named *gaude mihi*: the Latins also called it *albatara*; *tentiginem*; *columbus*; *amorem* and *dulcedinem*, *mentulam muliebrem*, and *pænem femineum*. Venette calls this part, *la fougue & la rage de l'Amour*—the rage and the madness of Love. I shall be excused for not giving the other names of the *clitoris*. For the remainder, its excessive largeness has caused several women to be ranked as Hermaphrodites, while they only differed from others in this part. [See 4 & 5, Pl. XV.]

prostates,

prostates, distil a humour which lubricates this canal.

The commencement of the conduit of pudicity, [9, Pl. XI. 1, fig. 2, Pl. III.] is, in Anatomy, named *vagina*: it is also called the external orifice of the matrice*. Some Ana-

* It is to this conduit that we must particularly ascribe all the names which the licence of manners has bestowed on the parts which distinguish the sex of the woman. In a *Traité des Hermaphrodites*, printed in 1612, with the Royal privilege and approbation, a work at present very scarce, the Author, (M. Duval, physician at Rouán) after having repeated all the names given to this conduit of pudicity, adds: ‘ I have heard it named *sepulchre* and *monument*, from Father Anne de Joyeuse, in a sermon which he preached at the church of St. Germain-de-l’Auxerrois, in Lent; because there, said this Preacher, the members become soft, and often undergo cariosity and corruption. St. le Veneur, then Bishop of Evreux,’ continues Duval, ‘ called it the *Valley of Jehosophat*, where the virile combat took place,’ &c. Chap. VIII. *Du sein de la pudicité de la femme & des oreilles y encloses*. In vain, perhaps, should we search for a medical book written so freely and so singularly as this Treatise on Hermaphrodites.

tomists assert, that a membranous circle, called *hymen*, shuts the chink of the *vagina* in those girls who have not permitted the entrance of any body capable of doing violence. Others, again, deny the existence of the hymen, which would be a certain mark of virginity, if it were found in all damsels. In speaking of Virginity, I shall shew what credit may be given to the existence of this membrane, after the best Anatomists.

The *glandulæ myrtiformes* [o, o, o, o, Pl. XI. 2, 2, 2, fig. 2, Pl. III.] are small fleshy eminences, circularly disposed round the entrance of the *vagina*, where they represent the leaves of myrtle. In young virgins, they are red, firm, and high, [fig. 1 & 2, Pl. III.]; and, according to some Anatomists, they join each other by some very delicate filaments, which compel them to keep together. Many other observers pretend, that these parts are no other than portions of the lacerated hymen. If this were the case, it would be inutile that we searched for the *glandulæ myrtiformes* in the state of virginity, while their presence is a sign of defloration.

The

The external parts of woman; that serve to generation, are exposed to some accidents; of which the most part, nevertheless, are defects of conformation, which attend individuals from the birth, and which Chirurgery may remedy. Sometimes the great lips are so united, that the *vulva* cannot be observed: we then make an incision, for the purpose of separating these two parts; and the operation is absolutely necessary. If it is a membrane that solely stops the entrance of the *vagina*, this conduit must also be cleared; and we there introduce a canula, in order to maintain the opening*. A girl, being imperforate from her birth, discharged the urine and the menstrual blood through the *anus*; and, nevertheless, she became pregnant. As she felt, at these parts, a violent itching and an excessive heat, she applied there frequent fomentations; by which means, the membrane that stopped the opening, was softened; it then broke, and thus gave a passage to the infant. On the complaint of a man against his wife, in consequence of having found invincible obstacles to the consummation of his marriage, the Judge commanded an examination. The

* See *Ambroise Paré*. Liv. XXIV. chap. I.

external orifice was discovered to be shut by a solid and natural flesh, there being solely a hole that was scarcely large enough to admit the introduction of an ordinary probe. Notwithstanding this, she was pregnant. A surgeon cut away this flesh, which was two fingers in extent, and half a thumb in thickness*.

In these two observations, it must be supposed, that there existed, in the obstacles even to the introduction of the penis, a conduit capable of receiving the seminal liquor, and of transmitting it to the neck of the matrice: unless it be preferable to admit the system of M. de Buffon; and, in that case, by regarding the seed as a liquor, whose active and prolific parts may penetrate transversely the texture of the most compact membranes, it will be easy to imagine how imperforated women have been able to conceive.

Some young women have been unjustly suspected of pregnancy, because a membrane, closely stopping the conduit of the *pudendum*,

* *Bibliothèque raisonnée de Médecine, &c.*
Tom. XVI. Art. *Imperfections*.

opposed itself to the evacuation of the menstrual flux. Medical books are filled with similar observations; in which we see that this inconvenience has always ceased, as soon as a passage could be given to the mass of blood that seems to indicate a state of pregnancy.

The orifice of the *vagina* is exteriorly covered by the muscles of the *clitoris*; and these have been named *acceleratores*: they are as the *sphincter* of the *vagina*, the orifice of which they bind and straiten, under certain circumstances. It is also by means of these muscles that some women possess the faculty of closing the lips of the *vulva*, whenever they chuse. Under these muscles, we discover an admirable net-work of small blood-vessels, that form a particular body, named *plexus retiformis*; below which, on each side, appears a gland, whose excretory conduit opens at the orifice of the *vagina*.

The glands which we find in this part, are there necessary, for lubricating it, and to facilitate the introduction of the virile member; which would not always be easy, if the conduit

had been deprived of a humidity that impedes in it a too great obstruction.

The Parts of which I have hitherto spoken, seem at first sight to have no other than a small connexion with those that yet remain to be described; and, nevertheless, their correspondence is so intimate, that an accident, however trifling, scarcely ever happens to the one without affecting the other. They equally participate in pleasure; and, during enjoyment, all these parts, in many women, seemingly partake the voluptuous titillation that agitates the *clitoris*. This part, which Nature has made the seat of voluptuousness in the fair-sex, contributes nothing, properly said, to generation; but its action has an influence on the matrice, to which it communicates a kind of agitation, that is necessary to it, for accomplishing the design which Nature proposed in the union of the sexes.

The mystery of generation does not commence, till we come to the matrice; till then, all is submitted to our senses: but here darkness takes the place of light; and man, advancing in this obscurity, essays different systems, which
he

he strives to support by observations, that each one strains in a favourable point of view, and adapts to his proposed hypothesis.

Of all the interior parts of woman, which serve to generation, the most considerable is the matrice. [3, Pl. I. 1, fig. 2, Pl. IV.] Its figure nearly resembles that of a pear, or an inverted bottle, being flattish on its posterior and anterior part. This figure changes in pregnancy, and is, at that time, nearly round. [5, 6, 7, Pl. XII.] With respect to the bigness of the matrice, we observe that, in a woman who is not pregnant, it ordinarily extends to the length of three or four fingers breadth, and about an inch in thickness. It is well known to be susceptible of a considerable extension, when it contains the fœtus, [Pl. III. fig. 1 & 2.]. In damsels, the orifice of the matrice is so narrow, that a stileto cannot be introduced there without difficulty, [Pl. III. fig. 1 & 2.] and its cavity, at most, will contain only a large bean. Its situation is between the bladder [2, Pl. I.] and the internal *rectum*, in such a manner, that its bottom lies high and backwards, and the neck of orifice is below and forwards. What I have

named the external orifice of the matrice, is the *vagina*; but, to speak properly, the external orifice is the neck [2, fig. 2, Pl. IV.] on which the *vagina* borders; and the part opposite the cavity of the matrice is, according to Anatomists, the actual internal orifice. It opens in the conduit of pudicity, by a transversal slit; from which it has obtained the name of *muséau de Tanche* — Tench-snout. [1, 2, Pl. X.]

The substance of the matrice is tolerably firm in women who are not pregnant; but it loses its firmness in proportion as pregnancy advances: and we observe that, in the last months, it is principally composed of a great number of blood-vessels, the fibres of which, for the most part, are fleshy. The internal surface is interspersed with a considerable number of small pores, and small vessels, which distil the blood that is to be evacuated every month. There we also observe nipples, and small glandulous knobs, from whence a slimy humour escapes. These last become larger, and exceedingly sensible, after conception, and adapt themselves with the *placenta*. [3, fig. 1 & 4, fig. 2, Pl. XIII.]

The

The cavity of the matrice has three evident openings, one of which corresponds with its neck; and by this conduit the man transmits the feminal liquor: the two others, situated in the lateral parts of its bottom, are the extremity of the two conduits called the *trumpets of Falopius*, [3, fig. 2, Pl. IV.]. These trumpets have their aperture so fine, when they penetrate the matrice, as scarcely to admit the bristle of a hog, [1, Pl. XII.]: in proportion as these tubes are more removed from the matrice, they become enlarged, [2, 3, Pl. XII.] and form, at their extremity, a membranous and musculous expansion, which is denominated *the pavilion of the trumpet*; the edge of which is terminated by small, musculous, and unequal dents, from whence this part has been called the *fringe of the trumpet*. [4, Pl. XII.]

This extremity of the trumpet is, in part, united to two white, oval, and flattish bodies, situated at the sides of the matrice: these bodies have received the name of *Ovaria*, [4, 4, Pl. I.] and which the ancients, and many of the moderns, have called the *testicles of the woman*. These bodies, interiorly considered,

appear to contain a prodigious number of small vesiculous gatherings, filled with a very clear liquor, to which the name of *eggs* have been given: and the spongy web, which surrounds them, appears to furnish each with a species of rind. These small eggs contain, according to some Anatomists, those individuals to which the woman must give life, after they have been rendered fecund by the man. According to others, the liquor inclosed in these vesicles is an actual prolific seed, destined to mix with that of the man, for the purpose of generation. These two sentiments divide Physicians; and the reasons will hereafter be shewn, which each adduces in support of their hypothesis.

The matrice, the trumpets, the ovaria, and two cordons named the *round ligaments*, which maintain the matrice, are enveloped in two folds of the *peritoneum*, called the *wide ligaments*. Dionysius believed, with a great degree of probability, that the round ligaments, which he named the *inferior ligaments*, serve to draw lower the matrice during coition, and to make the external orifice approach, for receiving the seed in the moment of ejaculation. This thought, says our Anatomist, sufficiently accords

accords with what takes place every day: for a man who has a short penis, or who introduces no more than one half of it in the *vagina*, does not therefore avoid the begetting of children, because the ligaments drawing down the matrice, bring it opposite the feed, in order to receive it; and they sometimes approach so near the external orifice, that damsels have been rendered pregnant, although an intromission of the penis had not place, the ejaculation of feed occurring only at the entrance of the *vagina**.

The vessels of every species, distributed in the parts of generation, are, as with men, divided in numerous ramifications. Women have equally spermatic vessels, [5, 5, Pl. I.] to which we ascribe the same function as to those observed in man; that is, the filtration of the prolific liquor: this, however, is questioned by Authors who adhere to the system of the eggs.

The parts which have been succinctly exposed, are subject to certain varieties, that do

* *Anatomie.* Demonstration IV.

not seem consistent with the ordinary course of Nature. I have spoken of those which have been observed in the *clitoris* and *nymphæ*; but a singular difformity, peculiar to certain nations, offers to Naturalists a vast scope for reflections. The Hottentot women have a species of excrescence, or hard and wide skin, that grows, in them, above the *os pubis*, and that descends to the middle of the thighs, in the form of an apron. Travellers say the same thing of the Egyptian women, but that they do not suffer this skin to grow, burning it off with hot irons. M. de Buffon doubts whether this is so true of the Egyptian as of the Hottentot females; though, however it may be, says this celebrated Author, all the native women of the Cape are subject to this monstrous difformity, which they shew to those who have sufficient curiosity, or intrepidity, for demanding to see or to touch it*.

There are other varieties, which we find only in some individuals. M. Littre, in dissecting a little girl who died at the age of two

* *Histoire Naturelle*, tome IV. *Des variétés de l'espèce humaine*.

months, found that she had the *vagina* separated, perpendicularly, in two equal cavities, by a fleshy partition; and each of these cavities bordered on a particular matrice. M. Littre presumes, that, if this child had lived, and been married, she might have conceived, in different approaches, now through one and then again through another part of the matrice, according as the seed of the man had been carried to the one or the other of these cavities*.

In the *Journal de Médecine*, we find an observation, that further proves the possibility of two matrices in one subject†. A woman who died at Paris, aged thirty-two years, had also two matrices, placed in the same manner as the first; and one of these, that equally merited the name of matrice, had served to the conception of several infants, who were all born at the proper time, and perfectly well conformed. The mother, after having brought these children to the world, conceived a foetus

* *Mémoires de l'Académie Royale des Sciences*, ann. 1735.

† Month of April, 1757.

in the second matrice, that could not stretch sufficiently for the movements and the accretion of the little being which it contained; in consequence of which the matrice broke, and caused the death of the mother and the child*.

We know that the parts of generation present singular varieties in *Hermaphrodites*; [1, 2, 3, 4, 5, Pl. XV.]: but the extraordinary observation, communicated by M. Baux, in the case of a young woman who had not the smallest mark of either sex, merits insertion in this place. ‘It is already several years since,’ says M. Baux, ‘that my father and myself were requested to visit a girl, aged fourteen years, of an exceeding good temperament, and very handsome figure, who was so singularly constituted, that she became the subject of our astonishment and admiration. She had not any mark of sex, nor the smallest appearance of genital parts, or anus——. Notwithstanding this whimsical conformation, the girl had a very good appetite, slept well, and worked, with many

* *Transactions Philosophiques*. Ann. 1669.

‘other

‘ other young persons of her sex, at silk-spin-
‘ ning. Nevertheless, as there could not be
‘ otherwise than an issue for the excrements,
‘ Nature had formed it through a way the most
‘ horrible and the most unpleasant that can be
‘ imagined*.’ Thus far, these circumstances
are frightful; but they offer nothing super-
natural. The remainder is marvellous. The
reins, and the urinary conduits, were without
action. The breasts supplied this deficiency,
and emitted, several times in the course of the
day, a clear and limpid water, that disengaged
the blood of its superfluous liquid †.

* This unfortunate object, at the end of two or
three days, used to experience, at the umbilical re-
gion, a dull kind of pain, which changed to very
strong irritations, and so increased, that qualms fol-
lowed, the stomach heaved, and at length cast up a
real excremental matter.

† The Author of this observation, who was a Mem-
ber of the College of Physicians at Nismes, &c. thus
concludes. ‘ I have been a witness, with my father,
‘ of the truth of these two facts which I attest, and
‘ which I do not pretend to explicate. I cannot
‘ say what afterwards happened to this girl.’ — See
the *Journal de Médecine*, for January 1758.

This

This observation, which is one of the most singular in the annals of Medicine, proves to what point our structure may be varied, through the extravagances of Nature: it also proves the force of Nature, (which is of the most importance to remark) that always tends to the conservation of what has existence, and that employs, for this purpose, the most extraordinary means.

The use of the parts which, in man, conduce to generation, is easier to develope than that of the parts of the woman. It cannot be denied that, in the male, the testicles serve to filtrate the seminal humour, and that the penis is destined to transmit it into the matrice; while, in the other case, the testicles of the woman [4, 4, Pl. I.] are regarded as being composed of eggs by one part of Anatomists, and as filtrating an actual feed by the other part of observers. These different opinions necessarily throw into obscurity the use of the organs which we have described.

Indeed, if the woman has not an actual feed, which is problematical, we must then consider the *clitoris* as the sole agent of pleasure;

sure: but how can the simple erection of this part form a substitute, in enjoyment, for the advantages which Nature has accorded to men? The nerves that enter in the composition of the penis, render its extremity of an exquisite sensibility; but erection is not solely sufficient for exciting those voluptuous sensations which give birth to pleasure.

If the *ovaria* are, as the testicles, destined to filtrate a feminal humour, the System of Generation, by the means of eggs, has no foundation; but thus we explicate the reason that the woman partakes of the man's embraces with as much ardour as himself. In following this system, it must result, that generation, for having place, demands an exact correspondence in the individuals of the two sexes that concur thereto.— Ah! how many women conceive, without experiencing any sensation that announces the rencounter, or even the flowing of the feminal fluids! How many men leave a numerous posterity, while she who gave his offspring life, never tasted the sweets that accompany copulation! Can the humour which supplies the *prostatæ*, and that expressed from the glands, which we observe in the conduit

conduit of pudicity, and at the orifice of the matrice, occasion the pleasure that accompanies enjoyment? This I shall by no means attempt to decide. I shall neither assert, like a physician who has made himself exceedingly well known by his Works*, that pleasure is caused by the *vibrations* of the valve, if I may thus express myself, that shuts the passage of the prolific liquor, when it has a tendency to escape. Pleasure is, according to this Author, a sensation that has for its cause an operation purely mechanical, independent of the action of the feminal fluid on the vesicles in which it is contained. Pleasure, then, would no more resemble a flash of lightning, that appears and vanishes in the same moment; it might in some sort be ascertained; and would even become a foreign sensation to what ordinarily produces it. — How! should Nature, that has attached pleasure to the act that perpetuates the species, render it independent of that act! — Persons who have not reached a state of manhood; those who have never been men; or those who are no more so; would have advantages

* *M. de la Mettrie, Art de faire des garçons: Tome II.*

of men favoured by age, by strength, and by temperament! — No! Nature will not suffer the *man* to envy the sterile pleasures of the *eunuch*: the first experiences voluptuousness in all its extent; and the last, no other than desires as impuissant as himself.

It must be concluded, that the immediate cause of pleasure in women is still unknown; or we must admit two causes by which it may be occasioned — the extreme sensibility of the *clitoris*, in one part of women, and the emission of some kind of fluid in the other.

CHAP. IV.

ON PUBERTY.

NATURE, by gradations which self-love nearly always renders insensible, precipitates man from the period of virility to that of old age. The passage from infancy to puberty is much more sensible. The child, advancing to adolescence, more susceptible of physical impressions — while Nature, before this term, provides him with nothing than what is necessary to his nourishment and accretion — feels the principles of life multiply in him by degrees. His powers augment; a fire, till then unknown, animates his imagination, and gives birth to desires, the character of which he inuitely searches to distinguish. The pulsations of his heart

heart increase at intervals, and to which a gentle languor succeeds: the child, disturbed by the changes which begin to take place in his constitution, is agitated at one time, and at another becomes sorrowful and pensive: he does not abandon this state, till Nature, having achieved her work, speaks clearly to the individual. It is then that his desires have an object, and that the man presents himself on the theatre of those passions which agitate him.

It is towards the age of twelve years with girls, and fourteen with boys, that puberty commences the revolution which must perfect and achieve their existence.

A sort of torpor, sometimes accompanied with dolor, is felt in the groins, and which communicates itself to nearly all the joints of the members. They experience, at the same time, a sensation till then unknown in the parts of the two sexes that must concur to generation: these parts, beginning to grow, are gradually covered with small filaments, that veil them. The sound of the voice changes; it becomes harsh and unequal, and afterwards

full, bold, and grave. This change in the voice, which is very sensible in men, cannot so easily be perceived in women, because the sound of their voice is naturally more shrill; but it may be distinguished by a delicate and attentive ear.

These signs, which announce puberty, are common to both sexes: there are some, nevertheless, peculiar to individuals; such as, the eruption of the menses, and the growth of the bosom in women; and the appearance of the beard, and emission of the seminal liquor, in men. It is true, that these signs are not all equally constant: the beard, for example, is not always precisely visible at the time of puberty; and there are even entire Nations where the men have scarcely any beard; while, on the contrary, there is no one people among whom the puberty of the women is not marked by the increase of the breasts*.

The Savages of America, in general, have nothing that indicates puberty, being deprived

* *Hist. Nat. of M. de Buffon.* Vol. IV.

of the hair of the chin, and having the private parts also uncovered. The women, in several cantons of this part of the world, have not, at any time, the periodical discharge that elsewhere announces puberty*.

It would then, in some sort, be impossible to ascertain the general epocha at which individuals may engender, while, among the Savages, that which announces the puberty of men and women does not make its appearance; I mean, the evidence of the hair and the beard, and that of the menstrua. The emission of the feminal liquor, and the accretion of the breasts, may solely announce it; but, even among the Savages, individuals do not attend to these marks of puissance, for resigning themselves to premature excesses!

It is essential to distinguish natural puberty from that puberty which I may be permitted to name *façtitious*. This last owes its

* See *les Voyages du Baron de la Hontan*, tome II. *Voyage au Pérou, de Don Juan*, tome II. *La défense des recherches philosophiques sur les Américains*, chap. IV. &c.

birth to dangerous company, to obscene books, to succulent aliments, and all that is calculated to inflame the imagination: the other is the work of Nature. The child on which it solely operates, tranquilly sees the changes which take place in him: the precious liquor which forms the cause, being separated from the blood, returns there perfected, and impregnated with spirits; and again pursuing the courses of circulation, carries strength and health into all the parts. Let us view the youth, already vigorous, who exercises his body in agricultural labours: a soft down just appears on his chin; his musculous members adapt themselves, with suppleness, to all that he undertakes; nothing exterior accelerates, in him, the developement of puberty — Nature operates for him what she operates for the trees, during the rigorous season of winter: we believe that they sleep, while she disposes and prepares the sap, that they may yield productions in the first heats of the spring. In opposition to this picture, behold a youth, abandoned to those vices which are but too common in society: his desires come before those which Nature implants, and the act precedes the temperament. Long before the term
fixed

fixed for enjoyment, the image of pleasure has been communicated to him through the medium of multiplied efforts; and he is conscious of nothing more than this image. Voluptuousness is conducted by Nature; and he who anticipates her operations, enervates the organs, that, sooner or later, will refuse to aid the incitements of Love: it is a plant cultivated by vanity, but that, exhausted through a too early ripeness, gradually decays.

If the epocha for enjoyment is not generally marked by exterior signs among all the people of the universe; and if the manners and the climate have more or less influence on the precocity of puissance; there is, nevertheless, a time marked by Nature for each individual. They acknowledge the force that agitates the delicate organs on which puberty has an influence, and the affluence of the generative principles which excite desire. In order to give a more perfect idea of this, I must borrow the sentiment of M. Buffon; and we shall then see of what importance it is for the health, to be capable of distinguishing the moment in which man may produce his likeness.

‘ To nourish, to develope, and to re-
 ‘ produce, are the effects of one sole and one
 ‘ same cause. The organised body is nou-
 ‘ rished by the parts of the aliments that are
 ‘ analagous to it; it developes by the intimate
 ‘ susception of the organical parts that are
 ‘ conformable to it; and it reproduces, be-
 ‘ cause it contains some organical parts of its
 ‘ own resemblance *.’

From these fundamental principles, M. de Buffon draws general consequences, that embrace all animated and vegetable bodies: to these I must restrain my object. The nourishment which we give to the infant from its birth, comprehends, as well as that which we substitute in a more advanced age, several parts which are not essential to developement, (that are not *organical*, to avail myself of the expression of M. de Buffon) and therefore are thrown out of the organised body by transpiration, and the other excretory ways. Those which are organical, or *nutritive*, continue and serve to developement and the nourishment of

* *Histoire Naturelle.* Tome III.

the organised body. It is very natural to imagine, that these last, being extracted and perfected, as has been seen in the Chapter on the parts of man which serve to generation, are the causes of reproduction; whether it is, that they really contain all the parts of the individual to which they must give birth, or that they alone serve to render fecund the egg which is thought to be inclosed in the woman. It is only by imagining the man in a considerable degree of accretion, that we can believe that the superfluity of the organical parts, no more finding so much facility in penetrating the texture of the parts, is compelled to re-flow towards those which co-operate to generation.

This is the reason that, while the body increases and developes itself, all the parts absorbing the nourishment, there remains but very little to be conveyed to each of these parts; the body continues its accretion, but is not yet in a state of producibleness. It must have obtained the greatest part of its accretion, and no longer want so considerable a quantity of nourishment in order to develope itself, before the substance adapted to make the seminal liquor can be conveyed to all the parts in

H 4

the

the organs calculated to separate it from the blood.

‘ The feminal liquor gets into and fills the
 ‘ reservoirs that are prepared for it; and when
 ‘ its plenitude is too great, it forces, even
 ‘ without any provocation, and during sleep,
 ‘ the resistance of the vessels in which it is
 ‘ contained, in order to escape outwards*.’ It is
 then that man is in the age of Puberty; ‘ and
 ‘ that the boiling youth,’ says Montagne,
 ‘ overheats himself so far in his harness, all
 ‘ sleeping, that he satiates his amorous desires
 ‘ in dreams†.’

Such is the Puberty towards which we are gradually conducted by time; and it will contribute abundantly to our health, if we wait for signs of puissance the least equivocal, before we resign ourselves to pleasure. In speaking of Sterility, I have shewn the advantages that will result, for each individual, by retarding, as much as possible, the sacrifices which every man

* *Histoire Naturelle.* Tome IV.

† Book I. chap. xx.

owes to Love. We have viewed the character of the Gauls, among whom it was reckoned scandalous to have a knowledge of women before the man had completed his twentieth year.

Young men, that an inflamed imagination precipitates to pleasures before they are capable of that indulgence, compel the matter of their accretion, by violent acts and continual irritations, to flow in the reservoirs, where it should tardily arrive. These men dig an abyss for themselves on the road of voluptuousness; they enervate their bodies; the loss of spirits quickly deranges the functions; they become lean, cease to grow; fall into the marasmus*, and expire; or, sorrowfully vegetating, cease to be men, at the moment when they ought to grasp the reins of manhood.

* The whole body, in this disease, grows lean and consumes. This state is sometimes frightful: in the last stage, the body resembles a skeleton; the skin clings to the bones, the belly sinks on the back, the visage is pale and frightful, the eyes sink, the temples fall in, &c. &c.

One of the reasons which induce men ordinarily to believe that women are, more than themselves, inclined to physical love, is the acceleration of puberty in the fair-sex. Indeed, in puissance, they precede the men; and, in all countries, the girls are more precocious, by some years, than the boys. We find the cause of this disparity in the constitution of women. In general, they are smaller, and weaker, than men; their temperament is more delicate; and, consequently, they do not want so considerable a time as men, before they obtain their accretion. Men, being larger and stronger, and having the bones more massy, we may easily presume that a longer time is requisite for the growth of their body. While it is only after the completion of this increase, at least for the greatest part, that the super-abundance of the nutritive matter begins to be conveyed to all the parts of the body into the generative parts of the two sexes; this matter must pursue its course sooner in women than in men, because their accretion is effected in less time, as in the total it is less, and that women are really smaller than men*.

* See *l'Histoire Naturelle*. Tome IV.

In admitting these ideas on nutrition and accretion, it is easy to resolve and explicate several facts relative to generation. The prolific liquor is less abundant in youth, because the parts, still increasing, the matter of this humour is there employed. Men, whose body is lean without being destitute of flesh, or fleshy without being fat, are more proper to marriage than those who have an immoderate bulkiness, and whose fatness is supported at the expence of the seminal liquor; because, with the first, the texture of the parts being compact, these parts, that, so to say, no more obtain accretion, return the nutritive matter to the parts of generation. By the same reason, men become so much the more capable of proceeding to generation, as they approach nearer to their physical perfection.

The example of the animals — who, not knowing any of the means which a thirst for enjoyment has induced men to essay, and following the laws of Nature more exactly than them; — ought to afford us instruction as to the time fixed for pleasures. Among the animals, at least the greatest part, (for the fish, with some others, here form an exception)

exception) there are no endeavours at reproduction, until they have finished their growth; and the accretion of dogs, for example, is nearly complete, when the female becomes hot, or when the male commences to seek for her.

The voluptuous, the *erotic* Poets, may vaunt the pleasure to which love gives birth in the unpolluted senses of young persons, when, not yet knowing what voluptuousness is, they interrogate it by soft incitements: but the true, and only pleasure, which we can for a long time enjoy, is that which offers itself to our senses when they are capable of making a return, of feeling all its sweetness, all its energy, of favouring its delicious extasies, and of prolonging it even by innocent artifices. We cannot procure ourselves these minute circumstances of pleasure, if the organs are not capable of their functions, and if they have not acquired their perfection: and it is by no means in childhood that we must promise ourselves this felicity. — Young man! that would'st remain so for a long time, wait till your temperament is decided, before you resign yourself to love: you will then proportion it according to your strength. If, at the age of eighteen years, your veins are swelled
with

with vivid spirits, that spread the impress of the desires on your visage; if the sight of a beautiful woman kindles in your eyes the torch of love; if the wanton and voluptuous images, which float in your imagination during sleep, strike the drowsy senses, and communicate the signal of pleasure to those parts which are the organs of it — young man! search for a companion, who will augment voluptuousness, and share it with you.

Although, in general, we can mark the time of puberty at fourteen for girls, and at sixteen years for boys, this age varies among different people. In all the meridional parts of Europe, and in cities, the greatest part of girls are pubescent at the age of twelve years, and the boys at fourteen; but, in the Provinces of the North, and in champaign countries, the girls are scarcely so forward at their fourteenth, nor the boys at their sixteenth year. Puberty is very precocious in the kingdom of Decan, which appertains to the states of the Great Mogul; for there they marry the girls at the age of eight years, and the boys at ten. It frequently happens, too, that the fruits of these marriages are produced in the
first

first year. Children, in Indostan, are likewise capable of matrimony at nine or ten years of age*.

One circumstance tends greatly to disconcert those who attribute these varieties to the influence of climate exclusively; which is, that the same thing occurs among a people inhabiting a country where the cold is exceedingly severe. The Samojedans occupy the septentrional part of the Russian empire; the state of which may be easily conceived: everywhere, frozen morasses, frightful deserts, and mountains covered with ice and snow, appear to the view; it is the coldest and the most horrible of all the inhabited countries of our continent. There, Nature seems only to have made a rough sketch of animated beings; since, after the relations of travellers †, the men and women of this country are extremely ugly; nor is there any perceptible difference

* *Mélanges curieux & intéressans*, &c. tome IX. See also what we have said on this subject in the last Chapter of the first Volume.

† *Mélanges curieux & intéressans*, &c. tom. II.

in the phyſionomy of the ſexes. Notwithſtanding this, puberty is precocious among theſe individuals: girls there, for the moſt part, are mothers at the age of eleven or twelve years; or, to ſpeak with more propriety, a girl ceases to be ſo as ſoon as ſhe can walk; and a boy, of twelve years, is able to rejoice his father, who would be a young man in our climate, by preſenting him his grandſon.

It cannot be ſuppoſed that Nature has favoured theſe people, in accelerating puberty among them. Theſe women, ſo precocious in reproduction, and who, as we have ſeen, become mothers at the age of nine or ten, and ſometimes eight years*, ceaſe to be capable of generation before they reach their thirtieth year, feeling, at that period, all the infirmities of old age; for the premature uſe of pleaſure, in countries even where Nature ſeems to have advanced the moment in which it may be fér-

* Mandelshof ſaw, in the Indies, a girl whoſe breasts were formed at the end of her ſecond year; ſhe had her courſes regular when three years of age; and, in her fifth, was delivered. See *le Dict. raisonné d'Anatomie*, &c. art. REGLES.

tile,

tile, hastens the term of our destruction. Although the Negroes of Guinea possess a very good and firm state of health, they rarely ever live to an advanced age: they appear old at forty. — Ah! can we, for this, accuse them of any thing else than the excess of debauchery, particularly with women? Nothing is so uncommon, says M. de Buffon, as to find a girl among these people who can recollect the time in which she ceased to be a virgin*!

The forward Puberty, which I have distinguished by *facilitious* and *natural*, depends on the climate and the morals. It is not surprising that Nature, in warm climates, prepares those germs quickly, which, everywhere else, must be tardily produced. If, among certain people, [the Samojedans, for example] individuals are pubescent, at an age which raises astonishment, under so rigorous a climate, the cause of it must be sought for in the morals. Indeed, men whom the excessive cold obliges to reside, nearly all the

* See *l'Histoire Naturelle*. Tom. VI.

year, in huts, where the whole family, being pressed together closely, has nothing to conceal from each of the members of which it is composed, must necessarily witness transactions, from their tenderest youth, calculated to irritate the desires. M. l'Abbé Chappe has very properly remarked this in his Journey through Russia. He saw that unbridled debauchery reigned among the youth, in different provinces of that extensive empire, where the cold is so extremely rigorous. ‘ The manner in which these people live in their cottages,’ says our Academician*, ‘ is exceedingly well calculated to accelerate the delapidation of the human species, in consequence of the excess of libertinism which those manners occasion there. They are ignorant of the use of beds, sleeping pell-mell, and nearly naked, on the stoves and the benches; so that the fathers and mothers cannot enjoy the rights of marriage without the privity of their children. Youth, more early instructed here than in other countries, acquire so much facility, that they are unable to resist these allurements to dis-

* *Voyage en Sibirie, &c.* Tome I.

‘ solutenefs. Thus are they obliged to marry
 ‘ them at an early period, in order to prevent
 ‘ the ill effects of a pernicious example.’

This corruption of morals furnishes a reason for the precocious puberty of some people of the North; while, according to the opinion of nearly all Philosophers, the temperament acts less in the northern climates than in those of the south. The septentrional inhabitants are less impelled to love; the sentiment of which is chaste and legitimate among them, says l’Abbé Chappe, further†, and nearly always criminal among the meridional people.

Men will, then, be sooner pubescent in consequence of the heat of climate, and likewise by reason of the depravation of morals. They will also be more robust, by reason of that which retards puberty, whether it be from the influence of climate or morals.

Sometimes we see, under our climate, examples of precocious Puberty. The cele-

* *Idem.*

brated Joubert, Chancellor of the University of Montpellier, saw, in Gascony, a girl named *Jeanne de Peirie*, who brought a child into the world at the end of her ninth year. St. Jerome informs us; that a boy no more than ten years of age, shared the pleasures of love with a nurse, who happened to be his bed-fellow, and that at length she became pregnant*. In a village which lies six or seven miles from Ypres, a girl under nine years of age, was, in 1684, safely delivered of a lusty boy. The age of this young mother was fully ascertained by the Baptismal Register †. It is no long time since we were assured that Paris had given an example of this species of phenomenon. I mentioned the occurrence in my first edition, after the general rumour that was circulated in that city, where I then was, and where no person seemed to doubt the truth of this singular event. Let us speak after M. Savary, then Physician to the King, who, in refuting tales that had visibly the mark of falsehood, shews not the smallest fa-

* *Tableau de l'Amour conjugal*, part II. chap. III. art. 2. *Traité des Euniques*, part II. chap. II.

† *Journal des Savans*. May 1684.

your to the one here noticed. ‘ Did not
 ‘ all the inhabitants of Paris,’ says he, ‘ run
 ‘ in crowds — to see a little girl, eight years
 ‘ of age, who was tutored to assume a state
 ‘ of pregnancy? They saw, or supposed
 ‘ they saw, all the external signs peculiar to
 ‘ that condition: all the details of the *rape*,
 ‘ the *pregnancy*, the *delivery*, and the *Ces-*
 ‘ *arian* operation, were printed in the form of
 ‘ a relation; and the newspapers announced
 ‘ the matter, with all its circumstances, nam-
 ‘ ing even the midwife, and the godfather
 ‘ and godmother... Nevertheless, this pre-
 ‘ tended wonder was no more than an im-
 ‘ position, contrived by the mother of the child,
 ‘ for gaining money at the expence of cre-
 ‘ dulous persons*.

It is more common to observe young girls, in whom the eruption of the menstrua seemingly announces a puberty the most precocious: but we ought not to regard those as pubescent, who have only this single symptom.

* See the Preface to Vol. VII. of the *Collection Académique*, foreign part; and the first of the separate Medicine.

A little girl, one year old, enjoyed a good state of health, and was, at that age, subject to the periodical discharge common to damsels who reach the age of puberty. Some physicians have observed the menses in girls, from the period of their birth, without interruption. They have been seen to appear at six months, at two, three, and five years, &c. in girls who equally enjoyed good health*. An infant, of four years, had the breasts, and the parts which characterise her sex, formed as in a young woman at the age of eighteen: she was three feet and half high†. The same author of whom I borrowed this observation, gives the history of a child, no more than six months old, who began to walk: at the end of his fourth year, he appeared capable of generation; and, in his seventh, he had a beard, and the stature of a man. Another infant, at four years of age, was four feet eight

* See *les Observations rares de Médecine, d'Anatomie, &c.* by *Van der Wiel*, tome I. *Le Journal des Savans*, Feb. 1683. *La Collection Académique*, tome I. page 296. tome III. page 132 & 263. &c. &c.

† *Bibliothèque choisie de Médecine*, tome I. art. ACCROISSEMENT.

inches and half high. He took up bundles of hay, each weighing fifty pounds, which he threw into the horse-racks.

In the environs of Prague, a child was born, in whom Nature had so far hastened the term of developement, that, at the age of three years, he threshed corn in the barn, and was capable of enduring the hardest labour of the field, even as the most robust countrymen. At this age his beard began to grow, and the other parts that have hair, appeared, in him, to be already provided with those filaments. At twelve years and half, he was a full-grown, large, robust man; and earnestly requested that he might be permitted to marry*.

A woman, in the diocese of Mans, was delivered of a male child, who, at the birth, had a great quantity of white hair on his head. When six months old, the head and the trunk of the body were also as large as in a man of thirty; and the parts of generation, covered with very thick and very long hair,

* *Collection Académique.* Tome III. p. 667.

were gifted with certain movements that are not common to infants. He died at the age of four years*.

In the month of July, 1753, a boy was born at Cahors, who, towards his fourth year, might have been considered as completely pubescent. The generative parts had then acquired their bigness, and all the exterior form, *exactly, well conformed*, which they ought to have in a man of thirty years. He had then a decided propensity for the female sex. He loved, says the Physician who communicated this observation, to find himself in the company of girls, particularly when they were *marriageable*; and, at those times, he manifested all the external signs of a very serious passion. His infantile physiognomy, and his reason, but little more formed than is common in children of his age, offered a singular contrast with his passionate deportment and his amorous desires. His voice was no less marvellous than the rest, being of the pitch of a countertenor †, &c. &c.

* *Journal des Savans*. February 1672.

† This observation, communicated by M. Fagès

After the established principles with regard to the nutrition and accretion of the body, these singular examples are not easily to be explicated. — Ah! who would undertake it? That which is extraordinary, does not come within the laws of Nature; and is therefore inexplicable. The physician who studies the formation, the developement, and the accretion of organised beings, in Nature always constant and uniform, may sometimes explicate their operations; but if he considers them in their extravagances, he will be constrained to acknowledge his inability. It is with extraordinary corporal faculties, nearly as with those of the mind: some children have given, in

de Cazelles, Physician to the King at Cahors, is inserted in the *Journal de Médecine*, for the month of January 1759. We may there see what was this extraordinary child's extent of voice, his strength, &c. these being details which might have appeared foreign to my object. We find likewise, in the same *Journal*, (September 1757,) the history of a very precocious infant, written by M. Nicolas du Saulfoy, Physician at Fougères. The form of the parts of generation in this child, from the age of three years, were so adapted, that they might have done honour to an accomplished man.

the

the tenderest age, proofs of sagacity, and of the elevation of their genius; but no person has been able to favour the world with an explanation of these prodigies—those who observed them having contented themselves with communicating the circumstances as they occurred*. We are necessitated to act in the same manner, with regard to the men whom Nature, it may be said, would *finish*, nearly in making a *first sketch* of her work.

There is, further, a marked resemblance between children famous for their intellectual qualities, and those here under consideration. Nature, who, from the cradle, has done every thing for them, seems to be exhausted, and to have accelerated the term of old age. Hermogenus, who professed rhetoric at his fifteenth year, with great reputation, forgot all that he knew in his twenty-fourth: and it is

* M. Baillet published, in 1668, the *History of Children, celebrated for their Studies and their Writings*. This Work was compiled for the education of the sons of M. de Lamoignon, then Attorney-General, whose children were confided to the care of M. Baillet. See *l'Histoire des ouvrages des Savans*, May 1668.

with

with reason that these children, whose wisdom was accounted a prodigy, have been compared to those insects of a day, that receive life in the morning, and are overtaken, at night, by a decrepid old age. I believe that it is also the same with men whom Nature favours, physically, from their birth: the history of their first age forms the most interesting epocha of their life, and we hear no more of them afterwards; whether it is that they fall under the *explosion*, if I may thus express myself, of the rapidity of their accretion, or that, after having attracted, for some time, the attention of philosophers, they return into the general order, as being distinguished by nothing from other men.

If I had the management of a child, who, by his physical faculties, announced himself thus premature, I trust that the prudence which I should employ in his education, without too much weakening the springs of the animal economy, would enable me to give society an utile individual. I should be extremely cautious not to constrain, with too much force, the impetuosity of his temperament; it would enervate a body that gave the fairest expectations,

tions. On the contrary, when the fermentation and the change that have place in men at the age of puberty, announce that the child can no longer retain the inflamed spirits that boil in his veins, I should not hesitate to chuse for him a companion, to partake of his transports. I would by no means select her from those women, whose lubricous constitution announces the thirst of pleasure; for the *manly Child*, giving way to this torrent, would be drained with too much rapidity in those moments of intoxication, which the god Titan himself, in his second youth, was unable to resist. I would recommend to my pupil a woman, moderate, without having any distaste for love; possessing the knowledge to enjoy voluptuousness, without exciting it; and capable of satisfying the desires, without greedily striving to give them birth. This would, doubtless, be a fortunate union: for Hymen, in seeing the limits of his Empire extend, would render homage to Nature; and Nature, attentive to all, would shed the most precious blessing on these bands — that of fecundity.

We

We find men who, very different from the children whose history has been previously given, possess nothing, to speak strictly, that announces puberty. I allude to persons who, without being impuissant, do not experience, at the age in which Love operates on the senses, those agitations that announce the animal want, for labouring to reproduction. There are some frigid men, who, at the age of thirty years, have not felt any certain signs of their capacity. Of these, a part have even been seen, who, during the course of a long life, never had any idea of physical love. Some individuals, and of this I have seen examples, possess a very singular constitution: the retention of the seminal humour caused, in them, uncommonly serious accidents; and yet these men had not the smallest idea of the occasion of their diseases. These maladies were so much the more formidable, as the patients suspected other causes, or, rather, conceived that they were in a state incompatible with means so simple of obtaining relief.

Sometimes, also, Puberty no sooner begins to declare itself, in some persons, than lubricity is announced to an astonishing degree.

gree. We find young women of a temperament so voluptuous, and so ardent, that, from the tenderest years, they give marks of an immoderate passion, which nothing can arrest: but this ardour naturally takes place in the greatest part of boys. It is even, ordinarily, a disease with girls, of which some particulars have already been given, and which we name the *furor uterinus*, *nymphomania*, &c. ‘ I have seen, and I saw it as a phenomenon,’ says M. de Buffon, ‘ a girl twelve years of age, very brown, tinged with a vivid and strong colour, of a small shape, but which was already formed, with a full bosom, and general plumpness, who committed the most indecent actions at the bare sight of a man: nothing was sufficiently powerful to quiet her agitations; neither the presence of her mother, or remonstrances, or chastisements. Nevertheless, she retained her reason: and her access, which was marked to a degree of horror, ceased in the moment that she found herself alone with women*.’

* *Histoire Naturelle*. Tome IV.

M de Buffon regarded the *furor uterinus* of this girl as a phenomenon, because that disease was truly rare in so young a child: it is less uncommon in a more advanced age; and if any person should doubt this assertion, the Treatise of M. de Bienville, which I have already mentioned several times, will demonstrate the contrary *.

The means which youth employ to prevent the inconveniences that may succeed a too long stay of the seminal humour, have the most forcible influence on their health. That man must have been born robust, and furnished for a long career, who, in order to challenge pleasure before his body has received its form, languishes and begins to feel, in the prime of his life, the infirmities, or at least the weakness, that precedes old age.

In the excellent work of M. Tissot, which I have also cited several times — a work which young persons ought to learn by heart as soon as they can read — we see but too many shock-

* See the first Volume of this Work, at Chapters II. and III.

ing examples of that species of debauchery which *murders* youth, even before the age of Puberty. A child, at Montpellier, *six* or *seven* years old, instructed by a servant, *polluted* himself so often, that a slow fever ensued, and which carried him off in a short time. So great was his fury for this act, says the Author of *l'Onanisme*, that it was impossible to restrain him to the last moments of his life*. The health of a young Prince diminished daily, and yet nobody could divine the cause. At length, his Surgeon began to entertain suspicions, watched, and surprised him in the flagrant act. He confessed that he had been thus instructed by one of his *valets de chambre*, and that he had frequently committed the like offence. This habit had taken such strong possession of him, that the most pressing con-

* See *l'Onanisme*, art. I. sect. II. It was in no-wise the shedding of the feminal liquor that caused the death of this child—while he was not capable of such an emission—but the convulsive movements, and the spasm, that frequently accompanied those excessive efforts. At that age, he could only excite a discharge of the humour which filtrates the *prostate*, and of which I have spoken in Chap. II.

siderations,

siderations, presented with force, failed to eradicate the evil; so completely had it overpowered him: he lost his strength daily; and no other way remained of saving this miserable youth, than to keep an eye on him day and night for the space of eight or nine months*.

Puberty, then, is an epocha which demands the greatest attention when young persons approach towards it. We have to fear, nearly always, the maladies which follow premature excesses, and sometimes those of which I have elsewhere spoken, and which attack young men whose constitution is incompatible with celibacy. We may place insanity in this last rank†, since those who live in a celibate

* *Idem.* Art. II. Sect. VII.

† The *mania* is a perpetual and furious delirium, without fever, but which presents the most horrid spectacle. Persons who are thus attacked, throw themselves on all which presents itself, demolish every thing, and ill-use those who happen to come within their reach. It becomes necessary to confine them in chains; and frequently they have sufficient strength to break their bonds. Sleep affords them no alleviation; for extraordinary visions, during

condition are, in general, more exposed to it than other men. This dreadful disease alters, to an astonishing degree, the connexion which exists between the spiritual and material substance that composes the man. Physicians, of all ages, have acknowledged, that the most ordinary cause that disposes and leads to this terrific state, is a want of the pleasures of love. ‘Of all the causes that dispose to the most violent delirium, and that tend to destroy the strength of the body and the spirit, by affecting the tone of the membranes and the fibres, I know none more terrible,’ says Dr. James, ‘than the effect of love*.’ In consequence of the mutual connexion which the soul has with the body, and the movement of the solids and fluids, there occurs a congestion and stagnation of juice in the spermatic organs: lascivious ideas are floating in the spirit, to which the imagination attaches itself with force; and this oc-

during that state of repose, throw them into an extreme agitation. They have a furious passion for women, &c.

* *Dictionnaire de Médecine.* Art. MANIA.

‘cupation throws the soul and the reason into
 ‘a surprising delirium. The seminal fluid,
 ‘corrupted by its stay, returns, through the
 ‘lymphatic vessels, into the mass of blood,
 ‘and communicates, as it were by sympathy,
 ‘its corruption to the fluid that is carried into
 ‘the brain and the nerves, and which con-
 ‘tributes to movement and sensation.’

Hippocrates has shewn us, in few words, (and which we have already observed) that the re-entrance of a corrupted fluid into the mass of blood, may derange the functions of the soul, and consequently produce madness. The blood, says this great man further, contributes so much to the understanding, that, if we molest its motion, and communicate to it some irregularity, an alteration in prudence, and in the notions and the sentiments of the soul, will immediately take place. When the blood is in a good state, prudence will maintain its station; but it will disappear, if the blood be once depraved*.

* *Lib. de Flatibus.* This passage, and some others, are what doubtless excited a Professor of Halle, named Grundling, to publish in Germany, about

Aretus, of Cappadocia, in the enumeration of the symptoms that accompany and characterise insanity, has not omitted the passion of maniacs for women. ‘ They have,’ says this ancient Physician, ‘ an immoderate inclination to the venereal act, which they publicly commit, without dread or shame.’

The diseases of the mind, which follow shortly after Puberty, have not always that degree of violence to which we have just alluded: they are often nothing more than a melancholy; but which, if neglected, pave the way to strange accidents, and, at length, end in a distaste of life. History abounds with events, that substantiate this truth; and it was extremely common, among the ancients, to

about the commencement of this century, a dissertation, which had for its title, *Hippocrates the Atheist*. We find this dissertation in a collection entitled *Loisirs*. Much *leisure time* would indeed be necessary for the composition of a similar work. Hippocrates found his defenders: Gœlike, Triller, Schmid, Leclerc, and Fabri, have proved the futility of the odious imputations thrown on the doctrine of Hippocrates. See *De la santé des Gens de Lettres*, by M. Tissot.

see a sutor despairing of love. A frightful scene, which took place a few years since, deprives me of the consolation which I should have in saying, that love loses much of its fury among us.... May no other act of barbarity ever recal to mind that atrocious scene, and the madness of the unfortunate Faldoni!

Almost every-body knows the history of Antiochus, son of Seleucus, who was so smitten with the charms of Stratonice, his mother-in-law, that love reduced him to the last extremity. We know, likewise, that the physician Erasistrates discovered this destructive passion by the pulse. Galen comprehended, in like manner, the extreme love of the wife of Boëtius, a Roman Consul, for the gladiator Pylades. An ancient philosopher was perfectly aware of the evils that may be caused by the erotic ardour, when he replied to a King of Babylon—who requested him to invent a cruel torment for one of his courtiers, at that time enamoured of his favourite mistress—
'Let him live! for his love will prove a
'sufficient punishment.'

A young

A young Athenian became so much captivated with a beautiful marble statue, that he asked it of the Senate, at any price, however enormous; and it having been refused him, with an express order not to approach it more, because his strange insanity scandalised all the people, he killed himself in despair.

Galeas, Duke of Mantua, being at Pavia, and riding over a bridge, precipitated himself, with the horse on which he was mounted, into the *Ticinus*, a deep and rapid river, because a young woman whom he loved, had commanded him to do so, in pleasantry.

Dulaurent says, he saw a young gentleman, *labouring* with the melancholy of love, whose imagination was so far deranged, that he thought he beheld continually the fair object who caused his affliction. He spoke solely to his shadow, says our Author; he called, caressed, and *kissed* it incessantly; always ran after it, and asked us if we had ever seen any thing so beautiful*. Dulaurent takes occa-

* *Les Oeuvres de Me. André Dulaurent, Médecin de Henri IV. Part II. Discours sur les maladies.*

sion, from this incident, to enter into some details on the beauty which every lover supposes to be visible in his mistress. I trust, that the passage in which this description of *beauty* is given, will not prove unacceptable to my readers; from whence it will be seen that the Poets do not possess the exclusive privilege of seducing images.

‘ However ugly the person, the lover
 ‘ represents her to himself as the most beautiful object in the world. In appearance,
 ‘ he sees long and gold coloured hair, curiously
 ‘ curled, and twisted in a thousand locks; an
 ‘ arched forehead, resembling a transparent
 ‘ heaven, white and smooth as alabaster; two
 ‘ uncommonly bright eyes, projecting from
 ‘ the head, and sufficiently divided, that dart

ladies mélancoliques. Those who have the work of Jacques Ferrand, on *the maladies of Love*, may know how much Physicians, particularly among the ancients, have written on this object. Ferrand gives, at the beginning of his Treatise, a list of the Authors who have written on *the cure of Love*, with the titles of their works. We find, at the end of the same book, the names of the Authors whom Ferrand has therein cited; and the list is very extensive.

‘ forth,

‘ forth, with voluptuous sweetness, a thousand
‘ amorous rays, as so many arrows proceeding
‘ from the quiver of Love; two eye-brows of
‘ ebony, small and in the form of an arch; the
‘ cheeks white and vermilioned, like lilies and
‘ roses, discovering a double dimple on the
‘ sides; a mouth of coral, in which he sees
‘ two rows of small oriental pearls, from whence
‘ issues a vapour more delicious than musk and
‘ amber, and more *fragrant* than all the odours
‘ of Lebanon: the chin, round and *pitted*;
‘ the complexion, smooth, fine, and polished,
‘ as white satin; a neck of milk, a chest of
‘ snow, and a bosom strewed with carnations;
‘ two small, round apples of alabaster, which,
‘ by the gentle agitations of love, alternately
‘ rise and fall; and in the middle of these are
‘ seen two verdurous and bright carnation tinted
‘ buttons, with a large valley between these twin
‘ eminences:.... the skin of the whole body
‘ is as jasper and porphyry, across which little
‘ veins appear — in short, the enamoured
‘ votary perceives in his mistress the *thirty-*
‘ *six beauties* requisite to perfection and that
‘ grace which is superior to all.’

One destructive consequence of the melancholy which attacks men, when reason cannot restrain the irritated temperament, is the mutilation of the rebellious parts. Although these examples, fortunately for humanity, do not occur every day, some Physicians have collected instances enough for shewing to what point the troubled imagination may urge a robust man, who would sacrifice Nature to Religion*. This precept of the Gospel — ‘*There are some who have made themselves Eunuchs for the kingdom of heaven,*’ having been badly understood by Origen, who taught Grammar at Alexandria, he resolved to execute, according to the letter, that perfection which he was persuaded Jesus Christ had proposed in those words; and he did not acknowledge his turpitude, till Demetrius, bishop of Alexandria, in a Council, caused him to be deposed, driven from the city, and excommunicated. Origen then felt the shamefulness of his condition, and condemned, himself, the

* See the *Theatrum vitæ humanæ* of Zwingerus; *le Traité des Eunukes*; *le Journal de Médecine*, &c. &c.

action which he had committed through a mistaken zeal *.

A young Monk, continually tormented by the itchings of the flesh, and the fire of concupiscence, also formed, for some years, the monstrous project of annihilating, in himself, the germ which gave those desires birth. He coolly concerted the best manner of destroying his virility, by making experiments on several animals; and when he thought himself capable of performing the operation with safety, he procured a razor, and accomplished his barbarous purpose with firmness and unshaken constancy. It was no sooner terminated, than he felt all the weight of the crime which he had committed; and fearing, with reason, for his life, he ran to the cell of his neighbour, and implored assistance. This miserable youth was cured through the prompt succours which he received from the Surgeon of the house †.

* *Traité des Eunuques.* Chap. VI.

† This observation, which was sent to the author of the *Journal de Médecine* by M. Maistrat, physician at Quimper, we find in the Journal for the month of March, 1758.

In

In 1750, a young man, residing at Fayance in Provence, persuaded himself, likewise, that, by mutilating the parts which were no other than the ministers of a voluptuous imagination, he should be exempt from the lascivious ideas, and the importunities, that agitated him without cessation. He performed on himself the like operation as the monk whose history we have just seen; but a considerable hemorrhage, which followed, would have caused his death almost in the same instant, if an experienced Surgeon had not arrived to his aid at that conjuncture. After the cure had been completed, this young man took the habit of a hermit, and retired to a hermitage in the environs of Bagnole, in Languedoc. Should we suppose that this unfortunate man was not much more tranquil than before his castration? And that this terrible amputation of the parts that separate the seminal liquor from the blood, was not capable of extinguishing the fire of his imagination?

An inhabitant of Fayance having asked this new Origen, if he no more felt the itchings of the flesh, since he became an Eunuch, the good hermit frankly answered —

‘ It

‘ It is the same thing, with respect to the
 ‘ defires *.’

No judgment can be formed of the danger of the operation that takes from man the faculty of multiplying his species, by the examples which I have previously given. Castration, which succeeds nearly in all animals, has, almost always, destructive consequences in full-grown men, because there is a necessity for stopping, by the ligature of the *spermatic cord*, the hemorrhage which follows the operation†: from thence originate the most dread-

* See the *Journal de Médecine*, for September 1758.

† Experienced Anatomists are not for placing a ligature on the *spermatic cord*, in order to stop the hemorrhage. M. Louis, a celebrated Surgeon, and secretary of the Academy of Chirurgery, neglected that measure, several times, without finding any inconvenience. A tight bandage may suffice for stopping the blood, after having applied the requisite astringents on the opening of the vessels. We find, in the *Operations* of M. Garengéot, and in the *Anatomy* of Palfin, given by M. Petit, the means of preventing the accidents occasioned by the ligature of the cord of the spermatic vessels.

ful

ful convulsions, inflammation, gangrene, delirium, and lastly death. The cure of the unfortunate men whose history has been seen, must be attributed to the good state of their constitution, and to the assistance of art. A great number have perished even under the operation*.

The following observation furnishes a dreadful example, which demonstrates the dangers attending the amputation of the *virile* parts: I prefer it to others, as, at least, it does

* The learned Author of *l'Histoire Naturelle* says, [vol. III. p. 229.] that the amputation of the testicles is by no means dangerous, and that the operation may be performed at all ages. It has, nevertheless, been seen, in the preceding Note, that skilful Surgeons do not consider this operation as exempt from danger, since they seek the means of opposing the very serious accidents which follow castration. This kind of mutilation must be so much the more dangerous, as man advances towards his physical perfection: in infancy there is not such an intimate correspondence between the testicles and the other parts, the vessels which prepare the seed having then no *action*; but, after the age of puberty, it is more difficult to interrupt suddenly, and without accidents, the use of the *spermatic* vessels.

not

not offer the frightful spectacle of a man who, armed with a sword, lays sacrilegious hands on himself, for the purpose of immolating his posterity. A poor mendicant, who roved from town to town, with a tolerably furnished wallet suspended to his neck, had the misfortune to attract the notice of a cut-purse; and the fellow, having remarked that, when the miserable beggar stooped, the bag hung between his thighs, watched an opportunity so narrowly, that, one day, while the poor wretch was picking up his provisions before a shop-door, he approached him behind, and at one stroke cut off the wallet and the exterior parts of generation. The mendicant fell backwards, and died on the spot*.

In this Chapter, and some of the preceding, it may be observed, that the excessive use of physical love, at the age of puberty, forms a source of disease: I come now to expose the accidents that result, in many persons, from a want of evacuating the feminal liquor, when it irritates the organs too much, and principally

* *Dictionnaire de Médecine*, art. AMPUTATIO, tit. *Amputation de Pénis*.

when

when it particularly affects the nervous genus. It is for every individual, in particular, to prescribe himself rules adapted to the temperament, for avoiding two opposite excesses ; the dissipation that exhausts, and the continence which deranges, the functions of the soul and the body. A person who is only affected by imagination, and which is not answered by the parts that have an intimate relation thereto; need not fear the accidents which are sometimes occasioned by a retention of the seminal humour : it is a fire which Nature does not kindle ; it is the work of agents which I have said excite *factitious* puberty. To remedy this disease, for as a disease I must consider it, it is necessary to abandon suspected company, to cease the perusal of dangerous books, (it is well known to *what* publications I allude) to use aliments incapable of carrying *trouble* into our spirits, and — which is perhaps most essential — to employ the powers in habituating the body by degrees to labour. In the third and fifth Chapters of the first Volume of this Work, the observations may be seen which I have made on these means of attenuating an *ideal* temperament, if it be allowable thus to express myself. It is absolutely necessary to
destroy

destroy this pretended puberty, in order that Nature may discover that which she accords to every individual who follows her laws.

With respect to young persons on whom the imagination has less power than the organs destined to set it afloat; I mean, those who have a chaste mind, while the matter is continually agitated; some of my former observations are sufficient for shewing, that all the anti-aphrodisiacs will not destroy the impetuosity of the fluid which searches to escape. Marriage is the most efficacious remedy. It is marriage that prevents or calms those terrific accidents, those diseases of the mind and body, from whence we have seen strange catastrophes result; catastrophes that agonise insulted Nature.

An event which the ancients considered as a prodigy, and which appears so to those who only observe superficially, is the metamorphosis, that is sometimes seen, of a woman into a man. It is here that I must speak of these marvellous changes, because they take place at the age of puberty, and that, otherwise, as will be seen in a succeeding page, they have

have a great relation to the signs which announce that epocha.

The individuals who, from girls, become perfect men, have been named *Gynandres*. Pliny relates several examples of this singular metamorphosis. A girl, at Curfula, a city in the Dutchy of Spoleto, says this Naturalist, who was still under the government of her father and mother, became a boy, and was confined in a desert island, by an arret of the *Auruspices*. Lucinus Mulianus speaks of having seen, at Argos, a person named Arescon, who formerly had been married as a female, having the name of Arescusa; *but who, in the course of time, was distinguished by a beard and the virile member, and afterwards took a wife as a natural man.* This author also says that, at Smyrna, he saw a girl changed into a boy. And I, adds Pliny, I have seen, in Africa, Lucius Cofitius, citizen of Trisdita, transformed, from female to male, on the day of his nuptials*.

* Pliny, Book VII. chap. III. Antoine du Pinet, in the notes which he has added to the text of Pliny, mentions several damsels who became men; and,

A young virgin of Champaign was changed into a man, and conducted to Rome, in the time of Constantine, according to St. Augustine's account*. Duval, in his Treatise on *Hermaphrodites*, has collected twenty-four observations, which concern these changes of sex, and which are, in part, extracted from different Authors †. ' In a child of our ' time,' says Duval, after Albert, ' a form of ' testicles became manifest in the superior part ' of the *centre of pudicity*. When a skin ' had been cut, without the fracture of which ' this child, who was supposed to be a girl, ' would never have been *capable of coition*, ' the testicles and the virile member was discerned; and the girl, thus become a man,

and, among others, two of the age of fifteen, and a young bride even on the day of her nuptials.

* *De Matrimoniis veteris & novæ legis.*

† Trajan, Titus-Livius, Raphaël de Volterre, Pontanus, Fulgoses, Amatus Lusitanus, Philostrates, &c. have furnished us with the facts cited by Duval; but among which there are several that do not merit any confidence.

‘ made choice, shortly afterwards, of a wife,
 ‘ by whom he had several children*.’

‘ A Collector of the Tolls for the King, at
 ‘ St. Quintin,’ says Ambrose Paré†, ‘ assured
 ‘ me, that he had seen a man at Rheims, in
 ‘ 1560, who had been esteemed a female till
 ‘ the age of thirty; but, then, gaming and
 ‘ toying with a chambermaid, his bed-fellow,
 ‘ the genital parts of the man began to de-
 ‘ velope. The father and mother acknow-
 ‘ ledging him to be of the male sex, he was
 ‘ permitted, by authority of the Church, to
 ‘ change his name from *Jeanne* to *Jean*, and
 ‘ to wear the habiliments of a man.’

The same Paré, being at Vitry-le-François, saw the famous Germain-Marie, or Germain Garnier, who, from a girl, became a man. At the age of fifteen years, being compelled to jump over a ditch, she found herself provided, in that instant, with the generative parts of man. The Cardinal de Lenoncourt, after the necessary examinations and enquiries, named

* *Traité des Hermaphrodites.* Chap. LV.

† Book XXV. of his Works. Chap. VII.

this new man, Germaine; and he caused him to quit the habit of a woman for that of his new sex*. Montagne, who was enabled to see this man, in an extreme old age, when he passed through Vitry, says that he heard a song there, very much in use among the girls of the environs, by which they cautioned each other not to *jump* too wide, for fear of becoming boys, like Marie-Germain†.

This last observation, confirmed in an authentic manner, proves the force of Nature for retaking her rights: for it must not be supposed that these individuals had been actually girls before the age of puberty. All the parts of the man were discoverable in them, from their formation; and a kind of weakness in the developement of those parts, had till then impeded their exterior appearance. Many children are born with the testicles concealed above the rings of the lower-belly: they afterwards appear, particularly at the age of puberty, which is the moment when all the parts

* *Idem.*

† *Essais de Montagne.* Book I. c. xx.

tend towards their perfection, and seek their place; and, in some persons, a disease, or a violent movement, as a spring or a fall, communicates to the testicles a sudden agitation, that causes them to descend into the scrotum. Some children may thus, with the testicles situated as I have already said, still have had the penis but little visible, or even concealed in the teguments; and this disposition must necessarily have formed a vertical plait, [3, Pl. XV.] which has been taken, from a defect of examination, for the great lips: at the age of puberty, then, in which we have seen that the growth of the genital parts augmented in a short time, those which were proper to the child, have developed themselves, and appeared at the exterior, as soon as they had been excited either by a voluptuous titillation, or some violent effort.

To this we may reduce all the marvels which the ancients have circulated with respect to these pretended transformations of woman into man. As to the histories which they have left us, and from which it appears that married women, whose spouses made no complaint on the score of physical love, have all
at

at once been changed into men capable of generation, we must consider them as absurd relations, and which do not merit the smallest attention *. I must yet add, that the ancients have more observations than the moderns, on the metamorphosis of woman into man, because many regarded those women as provided with the male parts of generation, in whom the *clitoris* had acquired an excessive bigness, and in whom the *nymphæ* were become pendent. I have shewn, in speaking of these parts, the degree to which they may extend in many women. There was nothing more necessary, than the extraordinary size of the *clitoris*, to impose on unskilful men, and for inducing them to regard those individuals, who were but too decidedly women, as males,

* We find several of these in the *Traité des Hermaphrodites*. Pontanus tells us of a fisherman's wife, who, after having been married fourteen years, suddenly felt a virile member proceed from her privy parts. He also speaks of another woman, who, after twelve years of enjoyment, found herself in the same case. We must place these histories with those which assure us, that men have all at once become women, and, as them, even conceived.

or at least as having the attributes of the two sexes. [See fig. 4 & 5 of Pl. XV.]

It is thus that the women of certain climates will pass, in our's, for Hermaphrodites, if it is to be determined by the state of the exterior parts of generation. M. de P.*** has entered into learned discussions, on this subject, with relation to the Hermaphrodites of Florida*.

Among the greatest part of the European nations, Nature is left to operate, when she labours for conducting man to puberty: superstitious and absurd ceremonies do not concur to deform man; to mutilate the parts which he has received from the Author of all things. If a barbarous custom still sacrifices, in some individuals, the germs of a posterity, whose *abortion* must be deplored by Nature, there is reason to hope that, in this philosophic age, we at length acknowledge that it is unjust, that it is cruel, to sacrifice man to talent, and that the execution of an arietta cannot coun-

* *Recherches Philosophiques sur les Américaines*, Part IV. sect. 3.

terbalance the entire existence of a human being. This dreadful operation should be much more facile of extermination among civilised nations, than by a people whom we regard as stupid — the Hottentots — to whom Religion prescribes the extraction of one testicle in each individual; and yet the barbarous custom which fulfilled the precept, is at length abolished.

It was at the age of puberty that every Hottentot was subjected to castration. That operation was performed with great pomp, and ceremonies as whimsical as absurd; the circumstances of which I related in the first Edition of this Work: in this I hasten to announce, that reason has at length prevailed among the Hottentots, and that we may now say, with M. de P**, even in a physical sense, *that the Hottentots have commenced to become men* *.

* *Recherches sur les Américains.* Part V. f. I. The ceremonies which I have said are observed by the Hottentots for castration, may be seen in the *Description of the Cape*, &c. by M. Kolbe; *Histoire Naturelle* of M. de Buffon, tom. VI. and the first [French] edition of this Work, t. II. p. 286, &c.

I shall not expose to my Readers the detail of all that has place, in divers countries, for taking from men their virility, in order to render them capable of answering for the fidelity of the women confided to their care. What a spectacle of horror is the sight of so many mutilated men in Turkey, Persia, in the kingdoms of Assan, Pegu, Malabar, and numerous others, where they condemn Nature to groan under the sword of cruelty ! The men thus withered, merit a greater or a smaller share of their masters confidence, in proportion as they have been removed from their natural state. Such of these unfortunate beings, in whom the organ has been left that essentially announces the masculine sex, are unable to tranquillise their jealous tyrants: they suppose them still capable of grasping the shadow of pleasure, or of communicating an imperfect voluptuousness to the sad victims who are placed under their management. All which has the appearance of virility, must be annihilated, so that Nature can no longer distinguish her work, to render an Eunuch worthy of the confidence of his master ! And, still, he will not entirely obtain that confidence, if, to the privation of the generative parts, he

he does not join ugliness and a frightful deformity. A wild Ethiopian is beyond any price, if he happens to be horribly black, if he has scattered teeth, a very flat nose, large and thick lips, and a forbidding aspect.— A smile of these monsters is sufficient to shrivel beauty !

Circumcision is widely different from the destructive operation of which I have spoken : it is a law of climate, founded on necessity ; and this custom of circumcising children has cleanliness at least for its object. The Orientals circumcise their children at the age of puberty ; and if it be necessary to give a physical reason for this, we may say that, in hot countries, where the prepuce is very long and transpiration abundant, they would have to fear that the humour which is found between the prepuce and the gland, would lodge there, and occasion ulcers, if they did not guard against the possibility of these accidents, by retrenching a part of the prepuce.

The amputation of the *nymphæ*, in girls, is also a circumcision, practised, as I have elsewhere observed, for warding off the inconveniencies

conveniencies that would oppose themselves to generation*.

The custom of circumcising children is extremely ancient, and subsists still in the greatest part of Asia. With the Hebrews, this operation must be performed eight days after the birth of the infant. In Turkey, it does not occur before the age of seven or eight years, and frequently they even postpone it till eleven or twelve years: in Persia it takes place at the age of five or six years; and, in the Maldivé Islands, they wait till the child has attained its seventh year†. In Persia, the

* In the fourth Part of *Recherches Philosophiques sur les Américains*, sect. IV. are interesting particulars of all that relates to *circumcision* and *excision*. These details, which we cannot give here, because they are connected to others that would extend this Chapter too much, clearly demonstrate that circumcision took its rise in climates where it was necessary; that, in process of time, it was introduced into others, where they might have dispensed with the practice; and that the religion of the country stamped on it the seal of irrevocability.

† *Histoire Naturelle*. Tome IV.

common

common women have a singular superstition: those who are sterile imagine that, for becoming fecund, they have only to swallow that part of the prepuce which is retrenched in circumcision: this is their sovereign remedy for sterility*.

There would be nothing censurable in many Nations, if circumcision alone was practised among them at the age of puberty: but, besides the mutilation of the parts of generation, there is also an operation in use, with some people, that, without extinguishing the germ of voluptuousness, aims at impeding the sacrifices to love: I would speak of *infibulation*, which is entirely opposite to circumcision. Celsus has conserved to us the method which the ancients followed, for proceeding to *hasp* the male children. They draw the prepuce out, says he, and mark, with ink, on the two

* These women do not have recourse to this ridiculous expedient, till they have tried others which are equally absurd: they consist in passing under the dead bodies of criminals suspended on the gibbet; plunging into water that has served as baths for men, &c. See *l'Histoire Naturelle*. Tome VI.

sides, the places intended to be pierced: they then traverse the skin with a needle and thread, and afterwards attach the two ends of the thread together, taking care to move it from time to time, till the cicatrices of the holes are hardened. The thread is then drawn out, and replaced by a hasp or ring, which is so much the better in proportion to its lightness*.

Those, among the Oriental Priests, who make a vow of chastity, wear a very large ring, in order to guard against the possibility of breaking that vow; and, according to the greatness of the ring's weight, is the proportion of esteem with which they are honoured on this occasion. Some of these rings are made so as to be opened with a key; but the Priests deposit it with the Magistrate of the place. However it may be, we cannot the less regard infibulation, among the Orientals, as a superstitious practice; since it is insufficient either to oppose desire, or the first signs that announce it: that precaution cannot even hinder these

* *Dictionnaire de Médecine.* Art. INFIBULATIO.

hasped men from satisfying their flesh, as the ring, which only embraces the extremity of the prepuce, is not calculated to impede a sort of erection, or even the effusion of the prolific liquor: it can solely oppose the intromission of the penis into the conduit of the woman; and, in short, it renders the men chaste, if that virtue alone consists in the privation of the act for which the sexes unite.

Some persons, therefore, improperly suppose that infibulation impedes erection: accidents would result in the parts of generation, on a supposition that the blood and the spirits were to be inclosed by a ring, against which lesser or greater efforts would take place, according to the temperament of the subject who wore it. By supposing the ring of a weight considerable enough to oppose the fluids that erect the penis, the same thing will occur in an ardent youth, which is observed in old men and those who are weak, having a lascivious imagination—for the commencement of erection suffices to provoke an emission of the seminal liquor. For the remainder, we must not regard this circumstance as an act of vigour, since it is met with in men weakened by age

or

or by a free course of life : it is even a disease which may render man sterile.

The Romans had a custom of infibulating children who were destined for vocal performers, with the design of conserving their voice. It appears, from some passages of Martial, that those people made a much less decent use of the operation here noticed, and that some Ladies secured the fidelity of their lovers by a ring, the key of which they kept in their own possession. Juvenal mentions this custom in his Satire on the women.

CHAP. V.

ON VIRGINITY.

‘ IF it be impossible to
‘ know the way of a ship in the midst of the
‘ sea, that of an eagle in the air, and that of
‘ a serpent upon a rock ; it will also be im-
‘ possible to discover the way of a man when
‘ he amorously presses a maid.’

The sage King Solomon, who pronounced
this oracle, and to which we may securely
conform, knew the difficulty, the impossibility
even, of being certain of a woman’s *integrity*;
and it is, nevertheless, to this state that the
generality

generality of men attach themselves, for the purpose of nourishing their self-love. Men, says M. de Buffon, jealous of priority in every-thing, have always valued themselves on that which they supposed could be first and exclusively possessed: the virginity of girls has been considered, from a species of folly, as having real existence. Virginity, which is a moral being, a virtue that consists alone in the purity of the heart, is become a physical object, in which all men are occupied: on this, they have established opinions, customs, ceremonies, superstitions, and even judgments and penalties: abuses the most illicit, customs the most dishonourable, have been authorised; parts the most secret of Nature, have been submitted to the inspection of ignorant matrons, and exposed to the eyes of officious Physicians, without once dreaming, that a parallel indecency is an outrage on virginity, and that the endeavour to discover it, is in itself a violation; that every shameful situation, every indecent state in which a young woman finds herself compelled to blush inwardly, is an actual defloration.

In the last Chapter of the first Volume of this Work, I have shewn the great importance which some Nations attach to virginity, while others do not seem to bestow on it the smallest attention. The first took extraordinary precautions, and employed the most scandalous means, for assuring themselves of this treasure. It is known, that the Ethiopians, and several other people of Africa, the inhabitants of Pegu and of Arabia Petrea, have the barbarity, as soon as their daughters are born, to draw together, by a sort of seam, the parts which Nature has separated, only leaving at liberty a space necessary for the natural evacuations. This flesh adhering by degrees, in proportion to the child's accretion, they are obliged to separate it by an incision, when the time of marriage arrives: There are some people who solely pass a ring through these parts; and the women, even as the girls, are subjected to this custom, which is so great an outrage on virtue: the only difference is, that the rings of the girls cannot be taken off, while those of the women have a species of lock, the key of which is solely committed to the custody of the husband. — But why, exclaims M. de Buffon, why do we cite barbarous

VOL. II. M barous

barous Nations, when we have parallel examples around us? Is the scrupulousness with which some of our neighbours pique themselves on the chastity of their wives, any thing more than a brutal and criminal jealousy?

I shall not here repeat the circumstances which I have elsewhere noticed, with regard to those people who hold virginity in abhorrence, and who consider as a servile work the trouble which it is necessary to bestow in taking it. It is grievous for love, to retrace the image of those horrible superstitions which lead the inhabitants of Goa to sacrifice the firstfruits of their virgins to a brazen idol; it would be painful for decency, to detail certain customs minutely, which authorise a stranger, or a Priest, to open the career of the pleasures for a spouse, who has chosen a young damsel to his wife. All the people who too highly exalted virginity, or who held it in too much disesteem, have cherished revolting, and sometimes horrible, absurdities. The famous statue, named by the Romans *Bucca veritatis*, decided on the honesty or the infamy of young women: they placed the finger in its mouth; and if a girl had lost her
her

her innocence, we are assured that the finger was bitten off by the statue. Those Vestals, who broke the vow of virginity, were interred alive. A damsel, condemned to death by these same Romans, was defloured by the executioner before he strangled her, that no dishonour might be attached to virginity*. O shocking barbarity! Let us discard the idea of these inhuman spectacles, at which Nature revolts.

Virginity is considered differently by Theologians and Physicians. The first say that it is a virtue of the soul, that has nothing in common with the body; and that, in whatever state a damsel may find herself, still she does not lose her virginity, at least when she refuses her consent to the act by which she is robbed of it.

Physicians, who consider virginity in a physical point of view, regard it as a material being, and suppose that it is an assemblage, a bond of the natural parts of a girl who has

* *Tableau de l'Amour Conjugal*, first Part, chap. IV. art. I.

not been approached by any man. Let us exhibit the signs, which are believed to be certain, of *material* integrity; for, with relation to the first, it has been seen that there is no one sign by which its presence can be announced; while thoughts, views, and words, are sufficient to make it disappear.

Several celebrated Anatomists* pretend, that the most certain sign of virginity is the presence of the membrane named *hymen*, when it seems to shut the conduit of pudicity. It is, say they, a membranous circle, and, according to some Physicians, a half circle, that is observed in the inferior part of the orifice of the *vagina* of young virgins. They likewise say, that this membrane is fleshy, very slender in children, and thicker in marriageable girls; and that it is no more discoverable in those who have suffered the approaches of a man.

The *Hymen*, according to M. Winslow, is a membranous fold, more or less circular,

* Fallopius, Vesalius, Riolanus, Bartholinus, Heister, Ruifsch, Bauhinus, Casterius, Spigelius, &c.

more or less large, more or less equal, sometimes semilunar, leaving a very small opening in some, and greater in others*.

M. de Saint-Hilaire, in his *Anatomy of the Human Body*, admitting the existence of this membrane, confidently says, that it serves to mark and to prove virginity†. Heister has shewn, at a public lecture, the *hymen* of a girl aged thirteen or fourteen years. That membrane varies, says this Anatomist: I have always found the *hymen* in infants; but, in proportion as they grow, it is gradually destroyed§.

What these Anatomists have advanced, would seemingly demonstrate the existence, incontestibly, of this membrane, if other Anatomists had not observed the contrary‡.

* See the *Anatomy* of M. Winslow.

† Book III. chap. xxi. edition of 1684.

§ See the *Anatomy* of Heister.

‡ Ambrose Paré, Dulaurent, Graaf, Dionysius, Mauriceau, Columbus, Cappivaccius, Augenius, Hygmor, &c.

They insist, that the membrane called *hymen* is nothing more than a chimera, and that this part is not natural to girls.

‘ Notwithstanding the diligence which I have used,’ says Dionysius, ‘ in searching for this membrane, I have not yet been able to discover it, although I have opened girls of all ages. We may have found,’ continues he, ‘ the neck of the matrice shut in some by a membrane; but these are particular and extraordinary occurrences, from whence it cannot be concluded that it must be thus with all maidens *.’

‘ For my part,’ says Dulaurent, I judge ‘ that this transversal membrane, if ever discoverable, is always beyond the institution and the design of Nature: for I have seen several virgins, and abortive infants, in whom there was not the smallest appearance of this membrane†.’

* Demonstration IV.

† The Works of Dulaurent. Book III. chap.

xii.

‘ We

‘ We in no-wise find that tunicle,’ says Paré, ‘ which some persons would have us call *hymen*, or *fleshy virginal membrane*, and which breaks or is torn, the women say, in the first act of coition. We shall conclude,’ adds our author, after having refuted Collombus, Fallopius, &c. ‘ that a virgin, being married at a proper age, with a man whose generative parts are, in size, proportioned to her’s, will experience no breaking of a membrane, nor any such effusion of blood,’* &c. Paré does not deny the existence of a membrane at the entrance of the *vagina* in some subjects; but he regards it as contrary to nature, and even communicates an observation, which shews the inconveniences that may result from the presence of this membrane†.

* Book III. Chap. XXXIV.

† See Book XXIV. Chap. L. After this observation, the Author adds — ‘ I shall always advise fathers and mothers, who know that their daughters have the aforesaid *hymen*, to let it be divided — because some girls — lost their lives, by reason that the menstrual blood had no issue.’

Bartholinus would refute those who deny the presence of the *hymen*, and Paré among others, accusing them of negligence in the dissection, and of incapacity *: but that imputation is unjust. Paré asserts, that he sedulously searched for the *hymen* on many corpses of girls, aged three, four, five, and to twelve years, without success — ‘ except once,’ says he, ‘ in the case of a young woman, seventeen years of age, who was promised in marriage: and the mother, knowing that her child had something which might impede her being called a Mother, requested that I would favour her with my attendance.’ She had, in reality, a membrane of the thickness of a parchment, which Paré divided †.

This contrariety of opinions on a matter that is confined to a simple inspection, favours the sentiment of M. de Buffon, where he says that men would fain discover that in Nature, which alone resides in their imagination. Moreover, in admitting the evidence of those who insist on the existence of the *hymen*, it will

* *Anat. Bartholin. Lib. I. de infimo ventre.*

† Book XXIV. Chap. XLIX.

from thence result, that this membrane, whether existing or whether destroyed, will be a very equivocal and very uncertain sign of virginity, or defloration. M. Winslow, whom I have before cited, in saying that the *hymen* is commonly found torn after the consummation of marriage, acknowledges, at the same time, that this membrane may also suffer some derangement by an abundance of the menstrual discharges, by particular accidents, by *imprudence*, or by *levity*. There are cases, then, where a virgin, in the sense even intended by Theologians, would be dishonoured, if proofs of her integrity were sought for in the state of the membrane here under consideration. — What Heister says, is still more conclusive, while he avows that, in proportion as girls advance in years, the *hymen* is demolished by degrees.

Dr. James remarks, likewise, that the *hymen*, on which the Jews found the proofs of virginity, is often effaced in girls of one month old, and very frequently in those of a more advanced age. I esteemed it my duty, says Dr. James, to acquaint the reader with this circumstance, because I know that several husbands

husbands have abandoned their wives, in consequence of not finding in them this slender proof of their virtue ; a proof which may, perhaps, have some weight in Judea and other warm climates ; but which ought not to create the smallest suspicion of incontinence in the damsels of our regions*.

Dionysius, obliged to speak of the actual signs of *Pucelage*, thus expresses himself. —
 ‘ I do not pretend to deny that there is some
 ‘ mark of virginity ; that the first copulation
 ‘ communicates pain to the one sex or the
 ‘ other ; that some drops of blood may be
 ‘ shed ; and that virgins experience a little
 ‘ dolor in the first embrace : but I do not
 ‘ believe that this happens, as is pretended,
 ‘ through the rupture and the breaking of an
 ‘ imaginary membrane ; there being more rea-
 ‘ son to believe, that it is occasioned by the
 ‘ efforts which the penis makes for entering,
 ‘ in forcing the *caruncula myrtiformes*, and
 ‘ in tearing and dividing the small membranes
 ‘ that join these together, and which render

* *Dictionnaire de Médecine, &c.* Art. HYMEN.

‘ this

‘ this aperture very narrow. Thus is it easy
 ‘ to discern that in which consists the true mark
 ‘ of pucelage. It does not, however, always
 ‘ happen,’ continues our Anatomist, ‘ that all
 ‘ young women give these slender evidences of
 ‘ their virtue; there being some whom Na-
 ‘ ture has freed from that trifling pain, by dis-
 ‘ posing these caruncles in such a manner, as to
 ‘ admit the entrance of the penis without dif-
 ‘ ficulty, although they have always prudently
 ‘ conducted themselves. Thus we ought not
 ‘ to decide so promptly on the honour of
 ‘ girls, while, besides, neither the straitness of
 ‘ the *vagina*, or the linen stained with blood,
 ‘ are positive marks of defloration*.’

If, in short, any person would possess
 a complete knowledge of the contrarieties which
 prevail among Authors, on the membrane here
 in question, he must consult Bartholinus †,
 Graaf§, Paré‡, &c. In the first will be seen

* *Anat. Dionis.* Demonstration IV.

† *Anat. Barthol.* Lib. I. Cap. XXXI.

§ *De Partibus genitalibus mulierum.* Cap. V.

‡ Liv. XXIV. Chap. XLIX. & L. Liv. XXVIII.
 Chap. II. On these notions of virginity, H. Korn-
 mann,

the contrarieties of those who admit his sentiment, and what weapons he employs for combating his adversaries.

Graaf seems to admit a membrane in young girls; but he pretends that it disappears in proportion as they advance in age. This Anatomist cannot be accused of having badly observed; he adduces all the application of which he was capable in his dissections, and on which an opinion may be formed from the exactness of his descriptions. The figures 1 and 2 of Pl. III. which we have drawn from the Works of this Author, are a proof of his accuracy. The first shews the natural parts of a child newly born; and from thence may be seen, by the drawing which Graaf has given, what we ought to think of the *hymen* at this age, and it is an age when that membrane, according to him, is most apparent. The orifice of the *vagina* is there marked [1, fig. I.] with the scales of the membrane, [2, 2, 2, *ibid.*] as well as the *clitoris* environed by the *nymphæ*. [5, *ibid.*]

mann, *Virginitatis jure tractatus novus & jucundus*, &c. may also be consulted.

The

The second figure exhibits the same parts in a girl six years of age: in this we remark, that the *hymen* already begins to lose its form. In short, in another figure given by Graaf, of these same parts, in a young woman twenty-four years of age, the membrane is not in any manner apparent.

For the remainder, it would be a singular proof of virginity, if the mark of it which existed in a subject, permitted generation, nevertheless, to have place!

I have already adduced examples of this*. Have we not seen that a woman, after a laborious delivery, found herself incompetent to physical love, through means of a membrane, — the *hymen*, if it must be so — which opposed itself to the intromission of the man's distinctive part? Have we not afterwards seen, that this woman became pregnant in spite of the *hymen*, and that she suffered a painful operation for facilitating the infant's pas-

* See Chapter III. of this Volume.

sage*. Severinus Pinæus, who wrote a *Tra&*
on the signs of Pudicity—de notis virginitatis—
 and who admits the existence of the *hymen*,
 asserts one particular thing, which shews how
 little dependance can be placed on the alledged
 certainty of these signs. This Author says,
 that the membrane here under consideration,
 humects and softens, and dilates and en-
 larges so facilely, when a girl has the periodical
 flux, *that she can admit a man as conveniently*
as a woman who has brought a child into the
world, although she be a virgin, and her pu-
dicity untainted. This Author adds, that the
 flux having ceased, the contractive force of the
 parts replaces them in such a state, that a per-
 son who had enjoyed her favours, could not
 reassume the intercourse, without the rupture
 and the infraction of the *hymen*; without an
 effusion of blood; and, in a word, without
 effecting a complete defloration.

Pinæus adduces two observations for prov-
 ing his sentiment; but I do not believe that

* See the *Nouvelles de la République des Lettres*,
 November 1686. The *Journal Encyclopédique*
 1764.

any person will adopt it as being very soundly established. I have only exposed this opinion for the purpose of making known the singular contrarieties into which those necessarily fall who admit an imaginary membrane, which, nevertheless, they have named *hymen*, *girdle*, *zone*, *cloister of virginity*, *dame of the middle*, * &c.

A sign which men regard, likewise, as the surety of a girl's virtue, is the blood shed in the first endearments. But those who have some anatomical knowledge of the parts of generation, know that there is nothing more

* The two observations of Pinæus are extremely pleasant: they concern two *judicious* men, who having espoused two girls of *notable pudicity*, in the circumstance in which the *hymen* permits a damsel the enjoyment of pleasure without defloration, were on the point of quitting their wives; but matters taking a different turn, they had *great difficulty* to re enter a course where they had found so much facility, and therefore acknowledged the injustice of their suspicions. Duval recounts these *histories* in his *Traité des Hermaphrodites*, chap. XII. *De l'hymen & autres parties adjacentes*.

equivocal

equivocal than this sign, which, moreover, may be supplied by the artifice of an experienced woman.

Without entering into a certain detail relative to the Nations, among whom the enfanguined shift is an indubitable proof of the integrity of new-married women, we shall observe, that this whimsical custom is, in particular countries, more or less rigorous, by reason, perhaps, that the people there are more or less enlightened. It is received in the different provinces that M. l'Abbé Chappe surveyed in the course of his Journey through Siberia; but with different modifications, which tends to confirm my opinion. In Siberia, and on the route from St. Petersburg to Tobolski, this proof of virginity is exacted with rigour. The men affect to assure themselves of this state by a jury of midwives, who there make their examination with the utmost severity, and which, every-where else, would be considered as indecent.. The following is a succinct exposition of that which occurs, in this respect.

The

The young married women remain alone with a midwife in the nuptial chamber: if the bride is admitted to be a virgin, the midwife who presides at the ceremony, receives a present; in place of which, when the damsel is judged to have lost her virginity, they compel her, in the midst of the assembly, to drink out of a bored glass; which is a species of affront.

After the consummation of the marriage, the women are permitted to re-enter; and these strip the new-married girl entirely naked, in order to assure themselves of her virginity. Among the different proofs, they regard as the most certain, that in which the linen has been stained with blood. In this case, they place the shift in a little trunk; and afterwards again summon the two spouses to the assembly. The trunk, containing the deposit of the young woman's virginity, passes first; and, as soon as this trunk appears, sounds of music proclaim the triumph of the spouses. During this concert, they shew the marks of the bride's virginity to all the guests; and, for several succeeding days, they hand the chest round to all their neighbours.

The marriage is interrupted by an astonishing uproar, when they do not meet with the required proof. The Abbé Chappe, who witnessed a scene of this kind, describes the circumstances of it with as much interest as agreeableness. This Academician adds, that, at Moscow and St. Petersburg, they are no longer so rigid with respect to virginity. Among the great, they generally content themselves with taking off the shift of the bride while she is in bed with her husband; and this shift always presents authentic proofs of her virginity*.

Let us examine on what the assertion is founded, That a girl who is a virgin always emits blood on being approached by her husband.

This blood, which is desired with so much ardour in the first enjoyment, arises from the rupture of the *hymen*, or from the too great straitness of the entrance of the *vagina*, and its disproportion to the body which strives to

* *Voyage en Sibérie.* Tome I. Part I.

penetrate that part. With regard to the *hymen*, I shall no more speak of it; but solely demonstrate, that a girl may have conserved her virtue in all the extent of the term, and yet be unfortunate enough not to have it in her power to give those proofs of her actual condition, by an effusion of blood, which a prejudiced man expects; and that, on the contrary; a young woman who has admitted the caresses of a man, may still, through certain united circumstances, flatter the self-love of a husband, as to the existence of her virginity.

This matter has been treated with all that accuracy which distinguishes M. de Buffon, in his *Natural History* *.

It is evident, according to this Author, that the effusion of blood, which is considered as an actual proof of virginity, does not take place under all circumstances, where the entrance of the *vagina* might have been naturally relaxed or dilated. Thus all girls, though undefloured, do not emit blood; others, who

* Tome IV. *De la Puberté*.

have in reality forfeited their honour, are liable to that emission: some shed it abundantly, and several times; others, very little, and once only; and some, again, not at all: for that depends on age, health, conformation, and a great many other circumstances.

A considerable change has place in the parts of both sexes, at the time of puberty: those of the man take a prompt accretion; and those of the woman increase also in the same time, particularly the *nymphæ*, which, though nearly imperceptible before, become larger and more apparent: the periodical discharges happen at the same period; and all these parts being in a state of accretion, and swelled by the abundance of the blood, they tumefy, they mutually strain, and become attached to each other, at every point where they touch. The orifice of the *vagina* is thus found to be more closely shut than before, although the *vagina* has increased during the same time: but the form of this contraction must, as we see, be very different in different subjects, and in the different degrees of the accretion of these parts.

M. de Buffon makes a remark, on this subject, which had, to that time, escaped Anatomists: it is, That whatever form this contraction takes, it only occurs in the time of puberty. ‘ The little girls,’ says he, ‘ whom I have had an opportunity to see dissected, had not any-thing like it; and, having collected the facts relative to this subject, I can assert, that when, before puberty, they have commerce with men, that commerce does not occasion any effusion of blood; unless,’ adds this Author, ‘ there happens to be a too great disproportion, or that rough efforts are employed.

‘ On the contrary, when girls are in full puberty, and in the time of the accretion of these parts, an effusion of blood very frequently happens, on the smallest touch, particularly if they are fat, and the menses regular: for those who are lean, or that have the *fluor albus*, by no means possess this appearance of virginity. An evident proof that this appearance has no solid foundation, is, that it occurs several times even, and after intervals of time sufficiently considerable; an interruption of some space, gives

‘ new birth to this pretended virginity; and
‘ it is certain, that a young woman who, in
‘ the first embraces, loses a great quantity of
‘ blood, may still lose more, after a long ab-
‘ stinence, even when the first connexion had
‘ continued several months, and had been
‘ so intimate and so frequent as can be ima-
‘ gined.

‘ While the body continues in a state of
‘ accretion, the effusion of blood may be re-
‘ peated, provided there is an interruption of the
‘ commerce sufficiently long for giving the
‘ parts time to reunite, and to regain their
‘ original state. It has happened more than
‘ once,’ adds M. de Buffon, ‘ that girls who
‘ have had more than one weakness, failed not
‘ afterwards to give their husbands this proof
‘ of virginity, without employing any other ar-
‘ tifice than that of renouncing their illegitimate
‘ commerce for some time. Although our
‘ morals have rendered women but too insin-
‘ cere with respect to this article, more than
‘ one have acknowledged the facts which are
‘ here adduced; and there are some whose pre-
‘ tended virginity has been renewed to the
‘ number

‘ number of four or five times in the space of
‘ two or three years.

‘ Those girls, in whom virginity is thus
‘ renewed, are not so numerous as those to
‘ whom Nature has refused this species of fa-
‘ vour. When the health is somewhat de-
‘ ranged, the periodical discharges bad and dif-
‘ ficult, and the parts too humid, neither any
‘ contraction or any folding will take place:
‘ these parts take their accretion; but, being
‘ continually humid, they do not acquire suf-
‘ ficient firmness for reuniting; neither carun-
‘ cles, rings, or folds, are there formed; a
‘ trifling obstacle, only, is experienced in the
‘ first approaches, and those are made without
‘ any effusion of blood*.’

Can it also be said that this treacherous
proof of virginity does not very often de-
pend on the disproportion of the organs?
and on the manner in which they are employed?
Sometimes a man wrongfully suspects the integrity
of the woman with whom he has an intercourse

* *Histoire Naturelle.* Tome IV.

for the first time; but, let him render himself justice, and he will probably find in his own person a reason for the absence of those signs which he expects. On the contrary, there are men gifted in such a manner, that they cannot fail of finding virginity every-where, if it be always announced by an effusion of blood.

There are also other circumstances which may impose on us, in this respect, as to the state of a girl: some inconveniences require the intromission of a *pessary*, that is sometimes of metal, and then it is impossible to find any sign of virginity, although the girl has nothing with which she can reproach herself. Moreover, ought we to confound defloration with particular accidents, the fruits of an inflamed imagination, and of an erotic temperament, which lead astray a young woman who inclines to pleasure.

‘ Nothing, then, is more chimerical,’ says M. de Buffon, ‘ than the prejudices of men in this matter; and nothing more uncertain than these pretended signs of the virginity of the body. A young person shall have connexion with a man before the age of puberty, and
‘ for

‘ for the first time, and nevertheless without
 ‘ giving any mark of this virginity: afterwards,
 ‘ the same person, when some time has elapsed,
 ‘ and she is come to puberty, shall have all
 ‘ these signs, and shed blood in the new ap-
 ‘ proaches, provided her health is not affected:
 ‘ she will not become a maid, till some time
 ‘ after her virginity is lost; and she may even,
 ‘ on the same conditions, become so several
 ‘ times in succession. Another, on the con-
 ‘ trary, who has, in reality, her virginity, shall
 ‘ no longer be a maid, or, at least, there shall
 ‘ be no appearance of it. On all this, then,
 ‘ men ought to tranquillise themselves, in-
 ‘ stead of giving way, as is frequently the
 ‘ case, to unjust suspicions, or to unfounded
 ‘ joys, according to their ideas of a woman’s
 ‘ virtue or impurity*.’

There results a much greater inconvenience
 as to the certainty which men believe they
 have of virginity or defloration. It is, when
 Tribunals order the examination of a girl, and
 she is inspected by ignorant midwives, or sur-

* *Histoire Naturelle*. Tome IV.

geons possessing a share of knowledge but little superior. I have seen some of these last regard the colour of the nipples as an irrefragable sign of lost virginity: others rely on infusions of some plants, of which they make those drink plentifully, whose state is to be ascertained: these take the measure of the neck; those examine the cartilages of the nose; another believes the truth to be discoverable by the sound of the voice, the colour of the skin, and the state of the eyes. But do they reflect that, in passing these hazardous judgments, the life frequently, or at least the honour, of a person is affected!

We find, in Venette*, a report of midwives, in 1672, concerning defloration; and nothing more fully proves the ignorance, at that time, of these women, whose blunders ought to be considered of the last importance. I have under my eyes a table, in which they described the parts that announce virginity or defloration, according as they found it in such or such a state. In Venette may

* See the first Part. Chap. IV. art. III.

be seen the relation of which I have spoken, and which solely concerns the parts of generation; here I shall expose the inductions that were formerly drawn from the parts which have no sensible connexion with those where the offence is committed. From this exposition it will be seen, how much sound philosophy has corrected the abuses which, in former times, prevailed in the judgments against virginity*.

TABLE

* Venette does not place the smallest confidence in the report of the three Midwives which he has cited in his Work, and, certainly, not without reason. It would be easy to controvert the proofs which these women adduce, of the rape committed on the person whom they had examined. They found the parts in a state that is not common to young virgins; but that was not a sufficient assurance, after they had *examined all with the finger and the eye, till they had found the traces of*—— In the table of the signs before mentioned, the Author places in the rank of those which announce defloration, the *o. pubis half open*. Every woman subjected to an examination, would have been found a virgin, if a dilatation of the *os pubis* was requisite for establishing the loss of virginity. We know that this extension is very rare, and that it can only be observed in some diseases.

TABLE OF THE SIGNS
WHICH INDICATE
PUCELAGE AND DEFLORATION.

<i>Indications of Pucelage.</i>	<i>Names of the Parts from whence these indications are drawn.</i>	<i>Indications of Defloration.</i>
Fine and erect . .	<i>The eyes . . .</i>	Sad and downcast.
Fine and white . .	<i>The whites of ditto</i>	Tarnished.
White and smooth	<i>The face . . .</i>	Freckled.
Fleshy	<i>The nose . . .</i>	Lean and thin.
Clear and pleasant	<i>The voice . . .</i>	Very harsh,
Good	<i>The appetite . .</i>	Bad.
Slender and thin	<i>The neck . . .</i>	Thicker.
Middling. . . .	<i>The breast . . .</i>	Larger.
White	<i>The nipples . . .</i>	Dark red.
Clear	<i>The urine . . .</i>	Thick.
Narrow	<i>Her stream . . .</i>	Large.
Smooth	<i>The hair of the penis</i>	Shifted.

It would be inutile to detain myself for the purpose of proving, that it would be ab-

veries, that follow a long and difficult labour. I shall not give the signs of defloration, drawn from the parts which had suffered, because they may be found in Venette and elsewhere, and also because the denominations of these parts are very different from those given to them by Anatomists.

furd

surd to place any confidence on these signs : they ought not to have any weight, after what has been previously seen, as to the physical impossibility of always discovering the integrity or the defloration of a girl, even by an inspection of the parts of generation*.

There is, nevertheless, a prejudice which some skilful men have accredited, respecting the sympathy discoverable between the organs of generation and those of the voice. I do not deny, by any means, the correspondence which exists between these parts, (there being convincing proofs of this); but what is asserted touching virginity, that the state of it may be known by the thickness of the neck, appears to me extremely hazardous.

It was a custom of the Romans, when they married a girl, to let her nurse, or some

* On this subject may be consulted the Tract on Virginity, by Kornmann— which I have already noticed — *De Virginitate tractatus novus*. Every difficulty which can be started, on the integrity of a girl, is there proposed, with the decisions of Physicians and Jurisconsults.

other

other woman, measure the thickness of her neck with a thread, in the presence of all the assistants. The next morning, after having entered the bride's chamber, with a certain number of the relations, she examined if the thread was still the measure of the neck; and when it was found too short, they cried, in a transport of joy, 'My daughter is become a woman!' Charles Musitan, an Italian physician, asserts, that he made the experiment of the thread more than a thousand times, and that it never once deceived him†. I believe that this proof may sometimes succeed, when, in imitation of the Romans, the measure of the neck is taken before marriage, and after the act by which it is consummated: but we should frequently deceive ourselves, if this proof, as Musitan describes it, was made on all women in general, who are accounted to live in a privation of pleasures. Do we not

* It is this custom of which Catullus speaks in these two lines —

*Non illam nutrix, orienti luce revisens
Hesterno collum poterit circumdare filo.*

† See the *Anecdotes de Médecine*. Second edition. Anecdote CLXI.

observe

observe girls whose neck begins to swell a few days before they have the menstrual discharges? Those who have little inclination towards love, receive their caresses with a tranquillity, an indolence, that cannot influence the parts of the neck: it is always, in these persons, of the same thickness, with relation to the other parts of the body. Moreover, this augmentation of bulk, is often no other than momentary, and lasts only a short time after the action. There are even many individuals of both sexes, who, by the transports which agitate them, experience this swelling every time they repeat the venereal act: it is even a reason for moderating our extasies, if we would not expose ourselves to dimnesses, to vertigos, and sometimes to an attack of the apoplexy. There is, then, nothing certain, as to the state of the neck, for drawing proofs of the absence or the presence of virginity.

Some persons pretend to have acquired, by experience, lights sufficiently great, for undertaking to decide on the defloration or the virginity of a young woman, in solely considering her exterior appearance. I aver, that the judgments which these persons so readily pronounce,

pronounce, must be very often unjust, while, after an inspection of the parts even, an Anatomist would sometimes find it difficult to give a decisive sentence. If we may place any confidence in history, Democritus was one of these profound men; but then the meeting was not agreeable to many women. Having, one day, saluted a girl, he addressed her the next as a woman, because he knew, by the air of her visage, that she had consented, since their former rencounter, to part with her virginity.

At Prague there resided a Monk, who knew persons by the scent, in the same manner as others know them by the sight; and who, thus, was enabled to distinguish, without deceiving himself, a girl and a chaste woman from those who were neither the one or the other*. I should sooner give credit to the fineness of the smell of this Monk, than to the other means of discovering the truth by signs nearly always equivocal: but Nature does not give to many individuals, except among the animals,

* See the *Collection Académique*, &c. Tome IV. pag. 330, 339.

this nicety of smell, that discovers, by the continual emanations of bodies, the changes, the variations, and the trifling revolutions to which they are subject*. We likewise find, in the *Essai sur Paris*, a very singular example of the fineness of a blindman's smell; by means of which he perceived that one of his daughters, for he had two, suffered her lover to take those liberties which are only permitted between man and wife.

I shall not conclude this Chapter, without observing, that the Romans, who, as we have seen, entertained the highest idea of virginity, had imagined several Divinities, who presided over defloration; so that, in every marriage which occurred, the Gods and Goddeses had each their particular office. *Dea Virginensis*

* Borrichius saw, in the house of a man of rank, ten young women, where a monkey was also kept. Among these girls, there was one, to whom this animal—attracted by I know not what scent, says Borrichius—continually attached himself.* The cause of this affection being investigated, it was found that the monkey's favourite possessed the most amorous temperament of all the ten. *Ibid.* p. 330.

was the Goddess who commenced the ceremony, and untied the girdle of the bride: she was followed by a God — *Deus Subigus* — whom they invoked in the moment marked by love for entering the list. A third Divinity — *Dea Prema* — took part in the happiness of the spouses, when they reunited their efforts, to procure themselves new transports. The last Goddess who presided at these mysteries, was named *Dea Pertunda*: she facilitated, to the Lovers, the career of voluptuousness; and strewed there some flowers in the critical moment when smart interrupted pleasure.

CHAP. VI.

ON THE

SEMINAL LIQUOR.

SEVERAL Philosophers among the ancients believed, that not only the germs of Animals were contained in the Seed of the male, but also that the menstrual blood of the woman was absolutely necessary to fecundation. The seed, and the matter of the menses, were, then, regarded formerly, as the sources of generation, and consequently of the multiplication of the species. Thus the ancient Philosophers had greater advantages than the moderns, for explicating the reproduction of man. He is;

said they, entirely contained in the seed of the male; the woman receives him in the matrice; and there he develops by means of the menstrual blood. Those who declared themselves in this manner, reflected by no means on the difficulty of conciliating the bad qualities which they supposed in the menstrual blood, with the functions which they accorded it of developing and nourishing the fetus. New observations have shewn the small relation which there is between the infant in the matrice and the periodical efflux of the mother, at least for the formation of the fetus; for we shall hereafter see, how much this efflux may accidentally influence generation. With regard to the embryo contained in the seed, the moderns are divided: some pretend, that this liquor contains, in reality, the man in miniature, and where all the parts, being exactly placed, wait only for a favourable circumstance to develop themselves; while others assert, that the parts of the animal remain in the seminal fluid, without adherence or order, and that they alone unite in the matrice: those who follow the system of the eggs, accord only to the seminal fluid a penetrating and active faculty,

culty, capable of fructifying the egg, and of giving life to the embryo which is therein contained.

These different systems, which I shall not here expose, owe their origin alone to the obscurity that prevails as to the *absolute essence* of the seminal liquor. Does this fluid contain the entire man? Do we perceive there any thing besides the different parts of the animal? Before that liquor is injected into the matrice, do many thousands of animalcules live in it? These questions, and so many others, agitated every day, and resolved by the Authors of the different systems, each to their own particular advantage, spread more and more the clouds of uncertainty on an object which great men have considered as impenetrable.

The father of Medicine, Hippocrates, considered the seed as flowing from every part of the body, but particularly the head. The seed of the man, says he, comes from all the humours of his body, and is the most important part of it. This is proved by the weakness which succeeds a too great indulgence in amorous pursuits. From all the parts of the

body there arise veins and nerves, that have a communication with the genital parts : when these are filled and inflamed, they experience a titillation, that is imparted to the whole body, and that conveys there an impression of warmth and of pleasure : the humours enter into a species of fermentation, that separates from thence the most precious and the most balsamic part ; and this part, thus separated from the rest, is conveyed, through the marrow of the spine, to the genital organs*.

Galen adopted the sentiment of Hippocrates. This humour, said he, is no other than the most subtile part of all the others : it has its veins and its nerves, that carry it to the testicles from all parts of the body†. Aristotle called it *the excrement of the last aliment*, that has the faculty of producing bodies resembling that by which itself is produced. Pythagoras said, that it is *the flower of the purest blood* ; Plato, a flowing, an effusion of *the spinal marrow* ; Epicurus, *a portion of the soul and the body* : Alcmaeon con-

* Hipp. *De genitura*.

† *L'Onanisme*. Art. II. Sect. VI.

sidered it *as a part of the brain**; and a celebrated Physician of the present day, has adopted this system, and amplified it in such a manner, that the seed, according to him, is an assemblage of an infinity of small brains †.

Notwithstanding some differences in the opinions which I have exposed, with relation to the seed, it is easy to perceive that this fluid has always been regarded as extremely precious. We admit, at this time, that it is separated from the blood, after this blood has been prepared in the very delicate vessels, which present it to the glands of the testicles, as I have elsewhere observed §.

Physicians who only consider the prolific liquor as it appears to the eye, without the aid

* *Ibid.* See also Dulaurent. Liv. VIII. chap. 2. Plutarch, *the Opinions of Philosophers.* Liv. V. chap. 3.

† *Mémoires sur divers sujets de Médecine*, by M. le Camus. In the eighth Chapter, I have inserted a brief account of this Author's system of generation.

§ See the second Chapter of this Volume.

of the microscope, regard it as a white humour, composed of two fluids; so that they divide the seed into two parts, the one prolific, the other unprolific: the second serves as a vehicle to the first, and is filtrated by the *prostatæ* and the glands of the urethra; while the first, which alone can be strictly called *seed*, is the humour contained in the seminal vesicles. This last, like the system which they admit on generation, is absolutely necessary for reproduction, and its vehicle serves alone to render it more fluid, to lubricate the canal of the urethra, and to defend it against the acrimony of the salts contained in the urine.

This humour of the *prostatæ* is, perhaps, the sole liquor which women discharge in the union of the sexes, or when they employ illicit means for appeasing an irritated temperament. But, it will be said, can the emission of this liquor give a taste of pleasure? Ah! who can affirm the contrary! I have already alluded to that which may be suspected as the cause of voluptuous sensations in women; and to that may be added, the expression, the issuing of the humour of the *prostatæ* in certain subjects. In a greater or a lesser degree,
pleasure

pleasure is *alike* in all men; while, among women, it is a *Proteus*, that probably varies in every individual*. How shall we explicate the cause of pleasure in persons whose organs do *not express* any thing, although these women avow the extasies of voluptuousness? It is no more, in this case, than a sensation excited by the titillation of the *clitoris*. How shall we explicate the pleasure of those who only taste it in a difficult emission!— The humour of the *prostatæ* must be the cause of this voluptuous emotion: it is, perhaps, to this humour that unfortunate Eunuchs, deprived of the organs which prepare the seminal liquor, owe that trifling sensation of pleasure which they experience, at least that which several persons assure us they experience. In short, when debauchery supersedes Nature, and young persons irritate the organs, whose

* I speak here alone of women who are conversant with pleasure; for it has elsewhere been seen, that there were a great number in whom the temperament rebelled against love, and who, with the best inclinations, did not experience any sensation, while they excited, in the conflicts of love, the most voluptuous transports!

functions

functions are not yet established, it is no other than the humour of the *prostatæ* that administers to the brutality of their passions: and when men, fatigued by excessive enjoyments, would still sacrifice to voluptuousness, at an age in which pleasure flies, if then capable of grasping some of its tints, they solely owe it to this humour, supposing that it can still operate, and again impart feeling to the fibres, which are frequently too weak for experiencing the lightest impression*.

The truly prolific part of the seed, that, in the union of the sexes, which is expressed from the seminal vesicles, viewed in a microscope, presents phenomena, as I have before observed, which vary according to the system

* Men who are spurred on to pleasure by an ill-conceived vanity, ought to know, that there are bounds for physical love; and that when the temperament opposes itself, I will not say to the desires, but to multiplied efforts, it is no other than the humour of the *prostatæ* that furnishes enjoyment. — How is it possible that those men who do violence to Nature, are incapable of perceiving the tepidity, and even indolence, of the pleasure which they pursue!

of the philosopher who considers this liquor. I shall briefly present some of these phenomena ; particularly such as have been brought into repute by the imposing names of those who observed them. It will be seen, that every discovery has been the means of building a new hypothesis ; and, after having exposed some of these, we shall, perhaps, be forced to abandon them, and to ask, *What is the seed?*

Hartfoeker advised an examination, in the microscope, of the feminal liquor, which is seldom, says M. de Maupertuis, the object of attentive and tranquil eyes*. But what a marvellous spectacle, when he therein discovered living animals ! A drop was an Ocean, where swam an innumerable multitude of small fish, in a thousand different directions. — We can scarcely refrain from thinking, that these animals, discovered in the liquor of the male, were those which must one day reproduce him ; and, in following this discovery, fecundity is wholly to be attributed to men.

* *Vénus physique.* Chap. IV.

Leuwenhoek,

Leuwenhoek, in his marvellous observations, found that these animalcules are so small, and in so great a number, that 3000,000,000 were not equal to a grain of sand! Nay more, this celebrated Physician saw the male and the female! These animals have a tail, and are of a figure which nearly resembles that of a frog when first produced: they have also the form of a certain great-headed water insect. At first, they are seen to be in great motion; but it slackens after a short interval, and the liquor in which they swim, being cold, or evaporated, they perish. In these little beings, viewed by skilful Physicians in the seminal liquor, they supposed they saw man under an envelope that gave him the form of a worm. Hartsoecker said, that man, covered with a membranous veil, was inclosed in the head of a worm, and that the tail answered to the navel. Hoffman believed, for some time, that the prolific liquor of the male not only contained animalcules under the figure of worms, but also globules, or transparent eggs, each of which should tend as a residence for two worms*.

* See the *Dictionnaire d'Anatomie; l'Art de faire*

I shall not here enter into any detail on the observations of *Dalempazius*, who singularly awakens the attention of Physicians, in announcing to them imaginary discoveries, that puzzled the whole republic of Letters*. It is now known, that the pretended Dalempazius was M. de la Plantade, of the society of Sciences at Montpellier, who published fictitious discoveries on the seminal liquor, for the purpose of turning into ridicule the microscopic observers. They were, nevertheless, the dupes of that Author's pleasantry; and even the great Boerhave enlarged on these discoveries in an hypothesis, which we may name the tribute rendered by a great man to human weakness. M. de Buffon seriously combated the discoveries of the pretended Dalempazius †; and this shews the impropriety of sporting with

faire des garçons; le Dictionnaire de Chirurgie; les Découvertes microscopiques; l'Histoire Naturelle; la Collection Académique, &c. where will be found the Observations of the Authors who have cited these opinions.

* See the *Nouvelles de la République du Lettres*, 1699.

† See *l'Histoire Naturelle*, tome III. page 221, &c.

any

any subject that concerns the sciences, since, through that meant, some persons are led into errors, and others employ, in refutation, a time that cannot be esteemed too precious for literature.

This anecdote also demonstrates the celerity with which error gains on men, and the efforts which are necessary for dispelling it. The celebrated M. Ferrein, in his public lectures at the amphitheatre of the King's Garden, did not forget to fix the attention of his auditors on the pretended discoveries of Dalempazius, nor to appreciate the pleasantry of M. de la Plantade. M. Astruc, adverting to this circumstance, pursued the same line of conduct in the Royal College. And, nevertheless, Dalempazius has been cited in modern works — whether for adopting his opinion, or whether for refuting it — as if, in reality, there had been a Physician of that name, who had seriously imparted his discoveries*.

* The following passage is inserted in the *Collection Académique*, [vol. VII. foreign part, page xxv of the Preface] — ‘ Have we not seen a face-
‘ tious

It was after these singular observations, that they arranged a system on generation. Living animals have been seen in the seminal liquor; and nothing is more simple than to imagine that these are, in miniature, the individuals of all the species. These animals must have a place in which they may grow, and obtain a certain size; and the seed injected in the matrice, fulfils that condition. But all Naturalists do not agree, even on the existence of these animalcules, of these spermatic worms. An Observer asserts, that animals really exist in the seed, and that they may be easily discovered with a microscope; but it is, says he, when the seed is corrupted, and which takes place in a very short time*.

‘tious writer, under the name of Dalempazius, presented the public with microscopic discoveries, and perplex the republic of Letters by these imaginary discoveries?’ At page 410 of the same volume, we find the extract of a Letter, ‘containing a microscopic Observation on the seed, by M. Dalempazius.’

* *Dictionnaire de Médecine.* Art. GENERATION.

Hartsoeker

Hartsoeker placed in a microscope the prolific liquor of numberless living animals, and always discovered in it the same phenomena. Physicians, according to the Author of the *Venus physique*, have searched for something similar in the blood and in all the other fluids of the body; but there they could not discover any thing, however great the force of the microscope; it always represented deserted seas, in which no signs of life were perceivable. Nevertheless, Valisnieri, Heister, and other observers, pretend that this species of animals is observable in nearly all the fluids. Valisnieri saw instances of this in the blood of infected bullocks; Hoffman pretends that he made a similar observation in the purest blood; Bono found these animals in the liquor of the *prostatæ* of women; and he assures us, that he was not able to discover them in the cock, and other animals, where these animalcules must certainly exist in prodigious numbers*. Verrheyen pretended, that what had been considered as spermatic worms, was no other than bubbles of air. Many Physicians have observed that these animalcules do not appear in children,

* *Dictionnaire d'Anatomie*, &c. Art. GENERATION.

and that in old men they are very small in number, and extremely languid; that, in a state of sickness, they are found equally weak and languid. How shall we conciliate these observations with those which seemingly demonstrate that corruption is necessary for the developement of these animalcules? How conceive that these diminutive beings can exist in the seminal fluid of a man attacked with a gonorrhea, as *Leuwenhoek* has observed?

This skilful Physician, by the number of his observations, has, perhaps, thrown more incertitude on the essence of the seminal fluid, than there existed before he had communicated his sentiments. The animalcules which he saw, living in the thinnest part of the fluid, those at least which were in that part, appeared to him in a state of immobility; but, as a compensation, he discovered there so great a number of different vessels, that he entertained no doubt of their containing all the nerves, the arteries, and the veins of the fetus. I am persuaded, says this Naturalist, in a letter to the Viscount Broucker, that I have seen more of this in a single drop of seed, than presents itself in a day to an anatomist in the dissection

of a corpse; which induces me to believe, continues he, that there is no vessel in the body of a full-grown man, that is not discoverable in the feed, when well constituted*.

I have already mentioned the prodigious number of animalcules which Leuwenhoek estimates to be contained in a single drop of the seminal liquor: how can the imagination extend, then, to that innumerable quantity of vessels which swim in this drop of liquor, and that must be placed according to the order of the animal economy, when the fetus is in the matrice! But, what most revolts against reason is, the strange disproportion found between the number of these little beings contained in a drop of the seminal fluid, and that of the individuals which come into the world. Immense richness! exclaimed M. de Maupertuis; unlimited fecundity of Nature! have you not here been prodigal? And may we not reproach you with too much preparation and expence? Of this prodigious multitude of little animals, that swim in the seminal liquor, there

* *Transactions philosophiques*, 1768.

comes but one only to humanity; for the most fecund woman rarely brings two children to the world, hardly ever three. And though the females of other animals produce a greater number of their species, that number is nearly nothing in comparison of the multitude of animals that swim in the liquor shed by the male.

M. de Maupertuis, after having thus apostrophized Nature, endeavours to justify her: but the reasons which he has given for this prodigality of Nature, did not appear just to several learned men. Of this I shall speak below.

These observations, and many others that I might have added, are not favourable to the hypothesis of seminal animalcules; since the little agreement which subsists between men who have embraced this hypothesis, is easily to be perceived. Their contradictions cast incertitude on the existence of these animalcules, as well as on their nature; of which we may judge by the difference in the descriptions which these observers give of them, and which

are deposited in the records of the most celebrated Academies of Europe.

Many partisans of the animalcules are embarrassed, on being asked, What is the origin of this infinite multitude of animated beings? And, if formed in us, what primitive principle is to be assigned for it? Are they existing in the world, and thus enter, with the air or the aliments, into the parts of which we are composed? But why, in this case, do they not at once take their abode in the eggs of every woman, and produce a great number of virginal conceptions? Moreover, have they solely the privilege of living from the creation of the world? And if it be said that they reproduce themselves, to perish afterwards, how is this generation between them to be explicated? Lastly, shall we suppose them to be immortal, and that they are limited to a certain number? But, then, it will follow from thence, that men would be limited to the consumption of the number of these animalcules; which is a repugnancy. On the other side, in supposing with physicians, that the little worm which swims in the seminal liquor, contains an infinity of generations from father to father,

father, we must accord him, as experienced physicians have done, his seminal liquor, in which animals swim as much smaller than himself as he is smaller than the father from whom he derived his being; and it is thus with each of them to infinity: so that, according to this system, Adam contained all the men who have appeared on the earth, and all those who must yet inhabit it—— This is the system which gave birth to the idea of *infinity*, although its partisans have not too much embarrassed themselves by examining whether, in physical matter, we can admit this word in all its force.

When the ancients had a fact to explicate, the cause of which was beyond their comprehension, they had recourse to *faculties*, and by that means resolved the most delicate questions. If the ancient philosophers were asked, how generation operated, they would answer —— By a *generative faculty*; and every-one was satisfied with that solution, or, at least, pretended to be so. It is very nearly the same with the answers made by the partisans of the system of spermatic animals, to the difficulties presented to their consideration. How can a being produce his likeness? They answer,

It is, because he was wholly produced, and that the reproduction of men was entirely completed in the first man.

The first man, or, as some will have it, the first woman, for there is no perfect agreement on this essential point, contained then the germs of all the men that were to be born; but these germs developing themselves successively, and in supposing the world eternal, (a supposition which may be admitted, in order to embarrass physicians) the partisans of the pre-existence of the germs will say, that Adam and Eve* contained in their seminal reservoirs not alone all the human beings that have appeared and that will appear, but also all those that might have appeared, or that may appear; that there is not even a young man or a young woman of whom the same thing may not be asserted: for I suppose in the universe as many *worlds* as there are couples of individuals of the two sexes capable of multiplying the species: if we place them in each of these worlds,

* This was the opinion of Father Mallebranche, who pretended that Eve contained in her ovary all the human race. *Recherche de la Vérité.*

there

there will from thence result, abstracted from fortuitous accidents, immense generations, that were all contained in the seminal vesicles of the first man, or in the ovary of the first woman, from the instant of their creation. In supposing all these generations to be eternal, we must also necessarily suppose, not an *infinite creation*, but an *infinity of infinite creations, actually existing*. But there is an inconsistency in infinite creation*.

* In the third volume of the *Histoire Naturelle*, [chap. II.] may be seen the great ideas of M. de Buffon on the word *infinite*, relatively to reproduction. This illustrious Author proves, that the idea of *infinity* can proceed only from the idea of *finitude*. It is here, says he, an infinity of succession, a geometrical infinity: each individual is an unity; several individuals make a finite number; and the species is the infinite number. Thus, after the same manner in which we may demonstrate that the geometrical infinity has no existence, we may assure ourselves that the progress, or the development, to infinity, has likewise no existence; that it is no other than an abstracted idea, an abridgment of the idea of finitude, from which we remove the limits that must necessarily terminate all greatness; and that we must consequently reject, in philosophy, every

I know that, in following the idea which is attached to the word Infinite, the partisans of the pre-existent germs would advert to Geometry, that would express the number of beings whose future existence is possible: but the limits which arrest calculations, do not arrest my imagination; I drop the pen, for want of the ability to express myself, and nevertheless I still perceive an immense course to travel over, that will always impress on me the idea of a number formidable to truth, but that is by no means infinite.

M. de Buffon proves, by a very simple calculation, that a grain of the elm-tree, which does not weigh more than the hundredth part of an ounce, will have produced, at the end of a hundred years, a tree of the bigness of ten cubic fathoms; but that, in the tenth year, this tree will have yielded thousands of grains, which, having been all sown, would produce as many trees, &c. and that, lastly, in the space of one hundred and fifty years, the whole

opinion which necessarily conducts to the idea of the actual existence of geometrical or arithmetical infinity.

terrestrial

terrestrial globe might be converted into an *organic* matter, analagous to the grain which had been deposited a hundred and fifty years before. This great Naturalist seems also to have been of opinion, that if, during thirty years, all the germs of every hen were permitted to be hatched, and care taken again to let all those hatch that might proceed from thence, without destroying any of these animals, there would be enough of them, at the end of that time, to cover the entire surface of the earth, placing them close to each other*.

Although reproduction seems and ought to be the same; I would say, to operate after the same manner in all animated beings; and that, consequently, a view of the calculations previously given may guide a little nearly as to the produce of the multiplication of the human species; I shall here adduce, in order to avoid the omission of any thing on this subject, that which M. Joulain, Engineer and Geographer of Louis XVI. has communicated to the public, with views foreign indeed to my object, but

* *Histoire Naturelle*. Tome III. chap. 2.

that

that may serve, nevertheless, to demonstrate how little we need reflect, for the purpose of admitting the pre-existent germs. M. Joulain having calculated the number of men who have appeared on the earth, since the creation, to the year 1749, (and these calculations are not pushed to exaggeration) clearly demonstrates that, if all those men were collected, it would be necessary, for containing them, to have a world of more than two hundred thousand and ninety-seven millions square feet, each man occupying only a square foot*.

* M. Joulain demonstrates that, in the course of 5749 years, there are 16,650,726,757,180,102,200,524,792 men born. In comparing, then, the solidity of our globe with this number of men born, it will be found that the globe must be more than 336 times greater for being equal to the mass of men who have appeared on its surface, if one man even occupies no more, in solidity, than a cubic foot. For the remainder, if some evil-minded persons would draw dangerous consequences from these calculations, and contrary to what the Scripture teaches us, on the subject of a general resurrection, they need only peruse the letter of M. Joulain: for it contains reflections capable of tranquillising the most scrupulous minds as to all that may affect the mystery of the resurrection.

These calculations, applied to the hypothesis of the spermatic animals, present it in no favourable point of view; particularly if we observe the prodigality to which Nature is driven, [in this hypothesis] for supporting the human species. I have already noticed the number of animalcules which physicians have observed in a drop of the seminal liquor. What an astonishing disproportion between these animals and the number of individuals that behold the light! M. de Maupertuis replies to those who call this profusion a crime in Nature, saying— ‘ How many thousands of the acorns fall from an oak, and become dry, or perish, in comparison of the very small number that germinate, and produce a tree! But see we not, even by that,’ continues he, ‘ that this great number of acorns was not inutile, since, if that which germinated had not been among them, there had not occurred any new production, any generation*.

resurrection. This letter is inserted in the *Journal Encyclopédique*, September 1, 1770.

* *Vénus Physique*, chap. IV. M. la Mettrie retorts this reasoning of M. de Maupertuis, in saying that,

This answer of M. de Maupertuis, which at first sight appears to be satisfactory, is so no longer, as soon as we narrowly examine the reproduction of beings in general, and the destination of that prodigious number of germs, which appear to proceed from the first created beings.

If all animals are not destined to eat each other, (for some of the species are incapable of thus satisfying the cravings of Nature) they must then necessarily find aliments on the earth, for supporting their existence; and vegetables alone can supply their necessities. Three thousand acorns are fallen from an oak; and it would even have furnished more, if a number of insects had not arrested the maturity of these buds, either for the purpose of nourishing themselves, or for depositing their eggs. Some quadrupedes found their subsistence in a part of the acorns which were scattered on the earth; some insects attacked there a part of them, and were the occasion that others

that, to produce an oak, all the acorns which had perished were wholly inutile, and that the single one which germinated was sufficient.

perished;

perished; the rest must germinate: however, a part shall still become the prey of animals, not only after germination, but likewise when the young plants arise from the bosom of the earth.—— Many germs, without doubt, are destroyed; but who does not perceive that this destruction was necessary for the conservation of certain animals! The abundance of germs therefore, in the vegetable kingdom, was necessary to that order which Nature has established for sustaining the existence of animated beings.

For the same reason, the multiplication of insects is prodigious; but nothing equals the fecundity of fishes. Leuwenhoek was of opinion, that the soft-roë of a single cod inclosed more spermatic animals than there are people on the earth at one time*. It is true,

* It results, from the calculations of Leuwenhoek, that, in supposing there to be thirteen milliards three hundred and eighty millions of men existing on the surface of the earth, (which is by no means probable) a number of animals ten times greater than that of men is found in the soft-roë of a cod, since the roë of that fish contains a hundred and fifty milliards. See the *Transactions philosophiques*, ann.

1679,

that, as the greatest part of the germs of fishes do not receive life, this prodigality of Nature would have been a pure loss, if these germs had not been destined for the nourishment of several species of animals, that seek them with great ardour. The grains, the fruits, the eggs, that do not directly serve to reproduction, have then another use: they are the aliment of the animals; while, on the contrary, that immense swarm of spermatic worms which perish, with the exception of a single one, becomes of perfect inutility.

This great number of spermatic animals was necessary, answer the partisans of the system, for making sure that one among them should be productive. How! would Nature sacrifice a terrific number of beings, millions

1679, N. 1. It is alone by admitting the spermatic animals, that the fecundity of fish is extended to this prodigious number. In following the system of those who contend for the *ovaries*, this fecundity is still astonishing, while a cod contains nine millions three hundred and forty-four thousand eggs; but it does not approach, by a great deal, that multiplication observed by Leuwenhoek.

of

of men in miniature, in order to produce one only of the species! And is this innumerable multitude, each individual of which has pretensions to existence, is it destined for annihilation, that one alone may see the light! This almost general proscription of created beings, spreads an universal gloom on the human species: the trifling number of mankind, scattered on the surface of the earth, is nothing in my eyes, compared to that which is every instant destroyed. The visible world is no more than an atom, if we place it to the side of that which is alone subjected to the imagination: in short, we should, according to those who support this system, seek the wonders of Nature in an unknown *world*, and which should offer, in certain respects, more subjects of admiration, than the world of which we make a part.

Nature would ensure reproduction! — Could she attain that certainty in no other manner than by creating this terrific quantity of germs, which inutilely perish? — But it was necessary — What, then! Notwithstanding these precautions, nothing is less certain than that one of these diminutive beings, among

among so many millions, shall behold the light. If a man internally uses a little turpentine, his *present* posterity (if I may be allowed the expression) is annihilated; and the spectacle of a general destruction offers itself to him who, provided with a microscope, then examines the seminal fluid *. Further, a drop of rain-water thrown on this fluid, will produce the same effect †.

To what end, then, should the sage precautions of Nature be directed, for the conservation of the species, if their destruction depended on certain circumstances, that may every instant occur? All *organised* beings are liable to circumstances, as well with regard to health as to disease. A healthy tree contained, originally, a multitude of fibres, that are only called to developement in certain circumstances, purely accidental: these fibres contribute to the reunion of the wounds that may be made in the tree. All the germs of a plant are destined to reproduction, the proof

* See the *Transactions philosophiques*, ann. 1678, No. 142.

† *Ibid.*

of which is easily established — Shall we believe that Nature has privileged the vegetables? Shall we believe that she has not given the same resources to individuals of the animal kingdom? That, in one kingdom, all must be vivid, all be utile, while, in the other, a general destruction prevails, from which some individuals alone escape, for conserving the species? If we accord to animals the same privilege as to vegetables, we must, in the same instant, abandon the spermatic animals, and confess that the simplicity of the means which Nature employs in her operations, by no means agree with the greatest part of our hypotheses.

That which I should most approve, would be *diffemination*: it presents to us, at least, the universe as a vast magazine, in which the Author of Nature had deposited, from the moment of the creation, the innumerable germs of all that exists, and that will exist. These germs, scattered in the indissoluble elements, and *immortal*, give a greater idea of the universe than that which offers to us the continual destruction of multitudes, the *absolute* annihilation of organised beings.

In admitting this hypothesis, and applying it to the subject in question, cannot we say that the germs contained in *all* organical beings, carried into the feminal vesicles of the man, or, as some will have it, into the ovary of the woman, are there the principle of the generation of the fetus? The prolific liquor shall, then, contain more or less of these germs; and their number will not deter me, because those which are superfluous, and that cannot be annihilated, shall re-enter the general mass without any alteration. The imagination, indeed, may be puzzled by the reflection, that the number of germs distributed in Nature appear to be limited, while we suppose them all created at the same instant as the universe. This number shall be prodigious, immense, and each germ, if we will, contain a certain quantity of other germs; but, in supposing the world eternal, (a supposition contrary to faith) there must be necessarily a time when no more new germs will remain for developement*.

* When a system is given on this object, against which no objection can reasonably be made, I shall not be difficultly convinced; and I will admit all that may be advanced, with relation to the total destruction

The system of M. de Buffon has not this inconvenience *. There exists an organic, animated matter, universally scattered in all animal and vegetable substances, which equally serves to their nutrition, to their developement, and to their reproduction. In speaking of Puberty, I said, that the aliments change to nutritive matter, and that the superfluity of accretion, being carried into the feminal reservoirs, there perfects itself, and there becomes the principle of generation. According to M. de Buffon, 'there are no pre-existing germs, 'no germs to infinity, contained in each 'other, but an organic matter, always active, 'always ready to *mould* itself, to assimilate, and 'to produce beings like those which receive 'that organic matter: the species of animals 'can never be exhausted of themselves; while 'individuals subsist, the species will always be 'renewed; it is as new at the present day as

struction of material beings. But while physicians essay hypotheses, in which they give forced consequences, and improbabilities, for probabilities, it appears to me, I have a right to expect that their hypotheses contain no one defect.

* See *l'Histoire Naturelle*, tom. III. & IV.

‘ it was three thousand years ago; all will subsist of itself as long as it is not annihilated by the will of the Creator *.’

In adopting this system, we must consider the seed as a composition of particles of matter, that cannot form any thing as long as they are connected to each other; but which, in the matrice, where they are deposited by the animal, disengage and arrange themselves through an unknown force, and from whose arrangement and reunion combined, an organised being is produced.

But this ingenious system is liable to objections. I leave those through the aid of which, physicians have roughly attacked the edifice, by denying that there can be any power whatever in Nature capable of arranging this immense quantity of moving globules, for making from thence a whole, as perfect as an animal; and by denying, likewise, the possibility of the *interior moulds*, that must, finally, mould the *organic* particles, supposed to be

* *Histoire Naturelle*. Tome IV. page 150.

unalterable, &c. Objections, more solid, have been formed, in opposing the system of generation by the eggs to that of the organic molecules*; attempts having been made to demonstrate, that the pretended seminal liquor of women is unprolific, since they may conceive without the smallest effusion, on their part, of any liquor whatever. Skilful Naturalists have maintained this opinion.

We may likewise say, with M. de Reaumur, who also made microscopic observations on seminal discharges, in which were discovered moving globules, organic particles of matter; that these globules are not organic particles, whose union can form a whole; but actual animals, of the same order of generations that succeed each other. In fact, may not the animalcules that live in fluids so different from each other, furnish us with reason to believe that they equally exist in the prolific liquor, and that the animalcules, which multiply in this liquor as in all the others where we have

* This will be seen in the Chapter on Generation.

discovered them, are absolutely foreign to its principal essence, and to its functions?

What shall we conclude from these different ideas on the nature of the prolific humour? What otherwise, than that this object is still involved in the most profound obscurity! We have viewed the seed as filled with spermatic animals; we have seen these eclipsed by the organic particles; and these last, in their turn, have been considered as animalcules that have no connexion with the reproduction of the animal in which they live. — But who has seen all this? Men who have been capable of deceiving themselves. We are, perhaps, placed at too great a distance from these small objects for discovering them; and man is probably more capable of describing the immense bodies which revolve in the heavens, than the germ to which he owes his existence.

‘ Provided with instruments so imperfect
 ‘ as the microscopes which we at present
 ‘ possess, how can we precisely ascertain any
 ‘ thing on this subject? Error here may glide
 ‘ in on several sides; the paths of truth are
 ‘ not

' not numerous. Movements more or less
 ' strong, more or less varied, more or less
 ' assisted by the fluid in which these globules,
 ' *these spermatic animals* swim; an evapor-
 ' ation more or less abundant, more or less ac-
 ' celerated, of this fluid; a decomposition
 ' more or less prompt, more or less gradual,
 ' of the particles; an air more or less pure,
 ' more or less active; an illusion of the optics,
 ' more or less difficult to discern or to pre-
 ' vent; and what do I know besides? a very
 ' active fluid, that may penetrate the seminal
 ' matter, or that of the infusion, and the
 ' movements of which are, perhaps, repre-
 ' sented by those of the *globules*; all this may
 ' seduce us, and lead us to embrace the ap-
 ' pearance for the reality*.'

Thus far extends our knowledge as to
 the nature of the seminal fluid: we know that,
 in order for generation to have place, the
 seed is absolutely necessary; but we are totally
 ignorant, if we would speak sincerely, of its

* *Considérations sur les Corps organisés, &c.*
 by M. Bonnet. Tome I. Chap. VIII.

operation in the matrice, for tending to the formation or to the developement of the *embryo*.

Not knowing the nature of its absolute essence, we are very far from making choice of the means believed to be proper for augmenting its quantity. We may say in general, that the prolific liquor will be found more abundant by a man who makes use of succulent and the choicest nourishment; that it will be more irritating in him whose imagination is impressed with lascivious ideas and voluptuous objects. But, then, these agents have not, for propagation, the efficacy of healthy nourishment and exercise judiciously combined.

As to the manner in which this fluid operates, when it is yet inclosed in the feminal reservoirs, nearly all living beings feel its impressions. We must search for the cause that impels the male and female, among all the species, to approach each other at certain times, in the tickling and irritation which this liquor produces on the organs that inclose it. This liquor, retained too long a time, occasions
madness

madness in the animals ; and we have elsewhere seen* what this retention is capable of producing in certain men, who, for their state, are too much favoured by Nature.

It is, therefore, common for all men (a few only excepted) to feel the influence of the seminal liquor at the epocha of puberty : we have seen examples which demonstrate that, in certain subjects, Nature has accelerated the moment of productive puissance. In order to consider, in all its points, the activity of this puissance, we shall instance some individuals who, at an age in which the powers decline, begin to feel the vivid impressions of a fluid, that seldom operates except in the prime of age.

I have spoken, in another Chapter, of a luxurious old man, whose exploits would be incredible, if they were not well attested †. A lawyer of distinction, at Puy in Vellay, hav-

* Volume I. chap. II. and III. Volume II. chap. I. and IV.

† Chap. I. *On the Influence of Marriage on Health.*

ing reached his seventy-fifth year, entered into the bands of marriage from a principle of conscience, not being able to offer further resistance to the tardy, but violent, eruption of a temperament which excited him to love. An armourer of Montfaucon, eighty years of age, found a sudden renewal of his powers, which he had supposed to be lost for ever: this man re married, and afterwards became the father of very beautiful children.

Among the examples of men favoured in their old age with the pleasures of enjoyment, there is certainly none more surprising than the history of the celebrated Thomas Parr. It is universally known, that this man, who was born in Shropshire, died at the age of one hundred and fifty-two years and nine months; but many persons are ignorant that, at the age of a hundred and twenty, having espoused a widow, the spermatic organs still furnished this extraordinary man with the means of tasting voluptuousness, and of communicating it to his wife: she affirmed, after the death of her husband, that the conjugal familiarities between them had only been interrupted

interrupted during the last twelve years of his existence*.

In all times, some men have been found in whom Nature has prolonged the use of physical love. Valerius Maximus relates, that Masaniſſa, king of Numidia, begot Methynnata after he had reached his eighty-sixth year. Another historian, much more modern, says, that Stanislaus, king of Poland, obtained two sons at the age of ninety: and Felix Platerus informs us, that his grandfather was

* Parr was a poor countryman, who lived, nearly his whole life, on nothing else than old cheese, milk, bread, small-beer, and whey. This man was capable, until his hundred and thirtieth year, to discharge all the duties of a labourer, and even to thresh in the barn. He died at London, the 16th of December 1635, under the roof of Count Armidel. His death was attributed (for he might have lived still longer, as appeared by the state in which all the viscera were found, on opening the body) to the change of air, to the irregular regimen which he followed in an opulent house, and to the abundance of wines, of every kind, which he was permitted to drink, after having been accustomed to a sober and frugal life.

an

an hundred years old when he ceased to be a father*. The history of the Academy of Sciences makes mention of a man in the Diocese of Séez, aged ninety-four years; and this man espoused a woman, who was pregnant by him, in her eighty-third year: she was delivered of a son at the usual time†. This example is the more striking, as women, for engendering, have a more limited time than men.

I might have added to these observations several others, if I had not feared to recall fables to memory that are inconsistent with reason. We read, in Maffée's History of the Indies, that when Acuna entered the city of Diou, an old man was presented to him, aged three hundred and thirty-five years, with his son, then ninety years old. The father had changed his beard three times, and his youth was renewed as many times: in short, he died at the age of four hundred. The

* *Anecdotes de Médecine*, tome II. *Tableau de l'Amour Conjugal*, first part, chap. III. art. VI.

† This observation was sent to the Academy by the bishop of Séez. See the *Mémoires* for 1710.

Missionary Jacinte, among the recital of singular circumstances in the life of this man, says, that he professed three religions; that he was a Heathen one hundred years, a Mahometan nearly three hundred, and, in his latter days, was baptised by the Monks*.

* We may consult, on these subjects, *Observations curieuses sur toutes les parties de la Physique*, &c. tome III. *sur quelques vieillards qui ont rajeuni*.

CHAP. VII.

ON THE
MENSTRUAL FLUX.

WE name thus a discharge of blood through the conduit of pudicity, which periodically occurs from twenty to twenty, twenty-five to twenty-five, and from thirty to thirty days, more or less. This flux has been called *menses*, and *monthly terms*, on account of its periodical return; and *purgations of the woman*, because the whole habit of her body is purged, by this means, of the superfluity of the blood. This discharge has

has also been named *flowers**, by reason that women, after the example of trees, which bear no fruit if flowers have not preceded, in general do not conceive before they have had the menstrual flux: exceptions, however, are sometimes found, as will hereafter be seen.

It would require a volume to give the different sentiments of Physicians on the cause of this discharge: it would even be the subject of an interesting question, to enquire, if this flux is in Nature or not? Those who pretend that indolence and dainty fare suffice to occasion the menses, may maintain that they are not in Nature; while those who consider them as essential to the accretion of the fetus, would view the human species as annihilated, if the monthly terms were to cease.

Passing over the opinion of those who admit, for the cause of the menses, a particular ferment, that swells and tears the vessels; pas-

* Some etymologists pretend, that this discharge has been named *flowers*, from the Latin word *fluere*, to flow.

sing over, also, the sentiment that gives to this superfluous blood a penetrating and malignant acridity, capable of searching to force itself a passage; without examining these opinions, I say, we shall not be necessitated, for admitting another, to accept the intervention of the moon's influence on women. It is pretty generally allowed, at present, that the blood which they lose every month, is a superabundant blood, the same which circulates in the vessels, and that this evacuation has no other cause than the general, and principally the particular, *plethora**.

This general plethora precedes the discharge; and it is even augmented during these times. It is a plenitude of the vessels, which are dilated through the efforts made by the blood against their coats: we easily perceive

* This opinion, which has been that of Galen, was developed by Dr. Freind, and followed by the most celebrated physiologists, as Boerhave, Sthal, Duverney, Senac, &c. It was also the opinion of the Author of a thesis maintained at Paris in 1756. *An catamenia a plethora?* in which it was concluded in the affirmative.

this

this in the swelling of the breasts, the redness and dejection of the eyes, &c. The plenitude must be more considerable in the vessels of the matrice, because they offer less resistance, which would be facile to demonstrate*. From hence arises, then, this particular plenitude, that is augmented by the slowness with which the veins return the blood that they have received from the arteries.

The blood of the menses is natural, of a vermilion colour, and has by no means that malignity which certain Naturalists have ascribed to it. The ancients erred, in asserting that women, in the time of this evacuation,

* The vessels, here alluded to, being very weak and very superficial; they easily dilate, and yield to the efforts of the blood: moreover, this effort augments in the matrice, because the vessels which have a communication therewith, have a greater length and diameter than those of the other parts; as the veins destined to distribute the blood of the arteries, make prodigious contours, the course which the blood must pursue is very long, and the resistance considerable of the part of the vessels destined to ease the matrice of the too great quantity of blood which it receives.

cause a shooting vine to perish, if they touch it; that they render a tree sterile, that they occasion wine to become sour, and iron and steel rusty; that they procure miscarriage on approaching a pregnant woman; that they render another sterile, that they make a dog mad, render a man foolish, &c.

Paracelsus, whose extravagances dishonour his wisdom; Paracelsus considered the menstrual blood as the most powerful of poisons: he asserts, that the devil produces, from thence, spiders, fleas, caterpillars, and all other insects which swarm in the air and on the earth. ‘This enthusiast,’ says Dr. James, ‘who was not deficient of imagination, and who had lost by accident, in his most tender youth, every mark of *virility*, never omitted any opportunity of decrying a sex, that continually reminded him of his condition, to whom he could not impart any *pleasure*, and from whom he could receive none.’

The blood of the menses does not differ, in any thing, from the blood of the vessels; and possesses no one bad quality, when the woman from whom they proceed is sound:
for

for, in the contrary case, it must have some influence on exterior objects, even as the other excretions, when they issue from a body that is infected by any disease.

There has been a difference of opinion as to the vessels which furnish this blood. Some have said, that it proceeds from the vessels of the matrice; and others have asserted that it has its origin in the vagina. It would be absurd to admit, exclusively, of either the one or the other of these two opinions. In the natural state, the blood comes from the vessels of the matrice, but sometimes it also flows from the vessels of the vagina: and by this means we account for the menses in a pregnant woman; for then the blood re-flows from the matrice into the adjacent parts, and there makes itself a passage.

What is more: the obstacles which oppose themselves to the discharge of the blood by the ordinary ways, compel it to flow back towards the parts, where it can escape with more facility; and these parts are sometimes very far removed from those where the excretion of the menses must occur. Medical

observations present several facts, that confirm this assertion.

A woman, pregnant of her third child, had a periodical evacuation of blood by the left ham*. The menses of another passed through her mouth†. The menstrual flux made itself a passage by the ears of a woman in whom it was suppressed§. In another, it took its course by the breasts, and a pimple on the cheek‡. In short, some women have been seen, in whom the menses issued from the tops of the fingers. It is easy to conceive that this superabundance of fluid, not being able to make a passage by the ordinary ways, runs elsewhere, and there forces the vessels.

* *Ephémérides de l'Académie des curieux de la Nature*, an. 1670. 'Obs. 96.

† See *Journal de Médecine*. November 1757.

§ *Dictionnaire de Médecine*, &c. art. MENSES. Forestus, Rodricus a Castro, Vander Wiel, and several other Authors, have left us similar observations.

‡ *Journal de Médecine*. January 1759.

After

After what has been said, in speaking of the changes which take place at the age of puberty, it is easy to account for the eruption of the menstrual flux at that epoch. The organs become stronger, and offer more resistance to the impulsion of the juices that contribute to accretion, of which one part is then superabundant, and thus furnishes the matter of the menses. Nothing proves more sensibly the efforts made by Nature, in these critical moments, than the difficulties, the uneasinesses, and sometimes those dangerous diseases which young women experience when the term approaches that marks this evacuation.

The aliments, the climate, and the passions, may accelerate the moment of the eruption of the menses. In the warmest climates of Asia, Africa, and America, the generality of girls have the periodical evacuation at the tenth, and even at the ninth year: it is less abundant than in cold countries, because, in these last, transpiration being less abundant, the blood of the menses must necessarily flow back on the other excretions. But, according to M. de Buffon, there is, in this respect, more

diversity between individual and individual, than between people and people; for, in the same climate, and in the same nation, there are women who, every fourteen days, are subject to the return of this evacuation; while others have it only at intervals of five or six weeks. Women who eat more than others, and that do not make use of any exercise, have the menses in greater abundance. Thus it has been improperly attempted to limit the quantity of blood which this evacuation ought to furnish, for a woman to enjoy a good state of health. That quantity varies in each individual. Hippocrates estimated it at nine ounces; in England they have reduced it to three ounces; in Spain, they suppose it may extend from fourteen to sixteen ounces; that, in Holland, it is about six; and much less in Germany. These variations are considerable; but, then, it must be acknowledged that the indications which can be procured, as to this matter, are very dubitable: it is, however, certain, that this quantity varies greatly in different individuals and in different circumstances; and we could, perhaps, rise from one or two ounces to a pound, and even more. Travellers assure us, that the women of Greenland

land are not subject to this flux; and the same has been said of the women of Brazil.

In the greatest part of women, this evacuation continues three, four, or five days; and, in some, six, seven, and even eight days; and these terms still vary, in a considerable degree, according to the influence of the climate, the aliments, and the manners. It has been said, that this evacuation occurs, in England, during the space of three days; four in Holland and France; and that it continues a much longer time in Germany; which by no means accords with the quantity of blood that has been estimated for the women of each of these nations.

The abundance of the matter that causes this periodical discharge, has also been considered as a proof of a good state of health; and, nevertheless, this is not, certainly, the opinion of experienced physicians. This abundance arises, sometimes, from the abuse of *unnatural* things, particularly from indolence and dainty fare. Now, I ask, if glutinous and slothful persons enjoy the best state of health? They have the menses,

R 4 nevertheless,

nevertheless, more abundantly than individuals of another description; and plethoric women have them twice, frequently, in thirty days. In Persia, where luxury and indolence prevail among the women, the menses appear twice, and even three times, during the space of thirty days. But, without searching for distant examples, do we not observe among ourselves, that the menses are so much the more abundant, and their evacuation as much longer, by some persons, in proportion as they take less exercise? Are not men, even, who lead too sedentary a life, more exposed to the hemorrhoids than those who use an abundance of exercise?

The abundance of the menses has, perhaps, more influence on the multiplication of the species than may be imagined. I believe that the regularity of the periodical evacuation tends to facilitate conception, and that some women do not conceive, except when they are approached immediately after the cessation of the menstrual flux*. But how many

* Feeling augments in the matrice as the menses approach; it has a more *exquisite* and more *delicate*

others cannot become mothers, because generation is interrupted by the presence of blood, that strives to force the vessels before the fetus can resist that impulsion? It is demonstrated, that women, particularly at the commencement of pregnancy, when they ought to have their menses, feel certain sensations, which are sometimes painful, that announce the efforts made by a fluid that endeavours to disengage itself from the mass of humours. If we suppose this fluid sufficiently abundant for forcing the vessels in which it is contained, an hemorrhage sufficiently considerable, an evacuation capable of occasioning *abortion*, will from thence result. Where is the practitioner who, in the course of his life, has not seen certain women become pregnant six or eight

‘ delicate sensation, that continues some days even
 ‘ after the evacuation has ceased. It is also the
 ‘ time in which women have stronger desires, and
 ‘ are the most amorous. They must conceive more
 ‘ easily; for I imagine that conception depends
 ‘ greatly on the *gaiety* of the matrice.’ *Traité des*
principaux objets de Médecine, avec un sommaire
de la plupart des Thèses, &c. by M. Robert. Tome
 I. chap. V.

times,

times, and sometimes more, without enjoying the satisfaction to behold themselves mothers? I saw a woman, says M. Tiffot, who miscarried twelve times before the end of three months; and she could never pass that term*.

These accidents are less frequent in the country than in cities; for, in general, the women who inhabit champaign situations, using much more exercise than those who reside in cities, are less subject to a superfluity of humours: their menses are not so abundant; and the blood for evacuation is not plentiful enough to occasion, in the first terms of pregnancy, the disasters of which we have seen but too many examples in cities. The menstrual blood, in too great a quantity, destroys then, every year, a considerable number of developed germs, and the annihilation of which

* *Essais sur les maladies des gens du monde.*
Art. VII. A first miscarriage is frequently followed by a second, and that by a third; for these losses weakening the women, it is very seldom that the fibres can recover their former tone; and the smallest incommodity, the slightest accident, then suffices for causing a miscarriage.

is a pure loss to Nature. If we still add to this, the conceptions rendered impossible by the same reason; I would say, by the difficulty which the feminal liquor finds in penetrating to the place marked for generation, on account of the little elasticity which there is in parts nearly always burdened with humours; it will be admitted that excessive menses must have a forcible influence on population.

We must likewise add, to the abundance of the menses, their irregularity, in order to form an idea of all the ravage which they may make. Some indolent women are subject to very frequent retardations, without any apparent cause: the suppression continues often two or three month. Sometimes there is a regularity in the returns of this evacuation, but a sensible diminution in the quantity; and these differences, in the same individuals, conduce to languor, weakness, disorders of the head, and to obstructions. How many women are there, who, every month, experience the most dreadful colics, the most horrible convulsions, before the appearance of the menses! These colics, called, by M. Tissot, *menstrual colics*, are placed by this skilful Physician

fician among the diseases of women who reside in cities; and this is sufficient to indicate the cause of these maladies, and the means by which they may be remedied.

In the country, where Nature still conserves her rights, we find but seldom those accidents which precede or accompany the periodical evacuation. What we most frequently observe there, is the pale colours in young women, by whom this evacuation has difficulty to establish itself. Girls of eighteen, and even twenty years, have not their menses perfectly; but when they have once obtained them, (and the exercise to which they are accustomed is adapted to accomplish this purpose) these girls continue in a vigorous state, the period becomes fixed, and is rarely deranged, unless some unforeseen accident causes disorder in the animal economy.

The inhabitants of the country also, notwithstanding certain circumstances, that must necessarily have an influence on their generations, are the people who furnish the most members to the State; and the regularity of the menstrual flux, in the country lasses, contributes

tributes greatly to that increase. A vacant, plethoric woman, is not always in a condition to share the sweets of love, when desire excites her husband; and in the short interval which remains after the periodical evacuation, it may happen that the man does not experience a renewal of the same dispositions, ere a new evacuation destroys all the hopes which he had conceived. With respect to those women who have the menses irregularly, and are subject to suppressions that may also cause slothfulness, and a diminution of elasticity in the vessels, I ask if we can, with more reason, assure ourselves that they will have the happiness of being mothers, even after conception?

To be a mother! That name is so sweet! It carries with it a sensation so delicious, that there are some women who would not consider the sacrifice of their fortune too extravagant a price for this glorious title. But, here, can grandeur operate? All is equal in Nature; on her the mines of Peru have not the smallest influence: gold may serve the purposes of ambition; but can it procure felicity? Nature ordained that the germs of happiness should

should rest in ourselves ; and there we ought to search for it. Notwithstanding the errors that remove us from her every instant, and that must draw her indifference on us, she has still ordained that we should again find, in her bosom, the salutary means of returning to our primitive condition — that the woman, accidentally sterile, need not offer sacrifices to Nature that are vain in her eyes ; that she deserves to be a mother, by announcing her wishes to become one ; that activeness shall give elasticity to all the parts of her body ; that a healthy regimen shall repair the disorders caused by intemperance ; and that the torch of Nature shall illumine her, and be substituted for those obscure lights which insult the supreme order established by the Creator. The repasts of our ancestors were as simple as themselves ; they consecrated to repose the hours unenlightened by the sun — What men were these ! What women had they for companions ! Did they experience those modern maladies, those vapours, those suppressions, that *weakness* of existence ? — The ancient Knight, after a fatiguing campaign, was welcomed by his *Lady*, who, in one hand, received his weighty arms, and, with the other,

other, pressed him to her bosom. Their children handled the redoubtable lance, with which their father had contended in the battle: but these warlike instruments are, at present, in our arsenals; and the vigorous man of our times beholds them with astonishment.

The eruption of the menses is pretty generally regarded as necessary for announcing puberty: I have said, in the Chapter which has this age for its object, that the menstrual flux sometimes precedes it, since some girls would have announced puberty nearly at their birth, if this evacuation was not, in certain cases, an equivocal sign of that epocha. I shall not here adduce the observations which I have elsewhere indicated*. I must combat a prejudice which prevails but too much among some persons: they assert, in comparing women to the vegetables, that the first are incapable of the use of marriage, if they have not the menses, or at least that conception cannot have place in those individuals; for, being similar to the trees, women can bring

* See Chapter IV.

forth no fruit before they have exhibited flowers. This prepossession may be disadvantageous to a young woman very proper for marriage, and in whom the aptitude to that state is sometimes the cause of this retardation. It may also be disadvantageous to spouses, who, imagining that their wives have not the sign which announces the requisite capacity for conception, would neglect them, and undergo chagrin at an evil which is not always an evil in reality.

It happens sometimes, says M. de Buffon, that conception precedes the signs of puberty: many women have been mothers before they had the smallest mark of the evacuation natural to their sex; and some, even, have not failed to engender, without being ever subject to this periodical discharge. From hence it is clear that the menstrual blood is no other than a matter accessory to generation, and that it may be supplied. We also know that the cessation of the menses, which commonly happens at the age of forty or fifty years, does not render all women incapable of conception: some have conceived at sixty, at seventy years, and even in a more advanced age.

age. These examples, if some will have it so, although they are not infrequent, may be considered as exceptions to the rule; but they suffice for shewing, that the menstrual matter is not absolutely essential to generation*.

We observe girls, daily, of a sufficient age to be marriageable, in whom the menstrual blood has not begun to take its course: but we remark, also, that marriage procures these individuals all of which they are deficient, for being supposed capable of conception. And when, after the approaches of the man, the evacuation of the menstrual blood does not occur, it would be absurd to suffer any chagrin, since the woman may conceive without that evacuation.

Fabricius Hildanus speaks of a woman forty years old, who never had the menses, either before or after her marriage, and who, nevertheless, had borne seven children, all of

* *Histoire Naturelle.* Tome IV. DE LA PUBERTY.

whom enjoyed the best state of health*. A miller's wife, aged twenty-four years, when M. Roessler gave the observation of which she is the subject, had not had to that time, after a marriage of eight years, the disorder peculiar to the sex, only during her pregnancies; so that she was certain of being pregnant, when her menses appeared†.

Numerous observations confirm, that the periodical evacuation may continue to an extreme old age, and even re-appear after an interruption of many years. M. de la Mettrie saw, at St. Malos, a Nun aged sixty years, who had then her menses. We find, in the *Journal de Médecine* §, the singular observation of a woman whose menses ceased at her fortieth year, and appeared again when she had reached her seventieth, in consequence of a fright.

* *Ephémérides d'Allemagne*, ann. 1675 & 1676. Rondelet relates the history of a woman of Montauban, who was delivered twelve times, and Joubert that of another, who had eighteen children, without having ever had the menses.

† *Ephémérides d'Allemagne*, ann. 1672.

§ Tome XVI. page 153.

She

She was still very regular in her seventy fifth year. A woman of condition, in Vellay, had the evacuation of her sex at an hundred years of age, after a suppression of fifty years, the same as in the prime of her youth*.

We know that the derangement of the menses and their suppression, besides the stabs which they give to population, occasion women so great a number of diseases, and of characters so different, that skilful physicians are embarrassed as to the means of contending against them: their embarrassment is increased, because the variety of symptoms which appear, will not always permit a discovery of the actual cause of complaint. These diseases are also the more destructive, as a trifling thing is sufficient to diminish, or to suppress, the menses in a tender and sensible woman. Fear,

* *Mémoires de Trévoux*, November 1708.—

The Marchioness of S—— V——, who was the subject of this observation, continued to have her menses till she reached her hundred and fourth year: This fact contradicts the assertion of M. de la Mettrie, that the appearance of the menses in so advanced an age, announces a sudden death.

choler, fright, a thick and gross air, aliments that inflame or irritate, ice cold water, the use of acids, a sedentary and vacant life, are so many agents that may cause the suppression; and it is easy to point out the description of women who are most exposed to this inconvenience*.

Here naturally arises an interesting question; to wit— *If, by the laws of Nature, men are subject to the same periodical evacuations as women?* Sanctorius affirms this evacuation, and other Physicians maintain the con-

* I do not contradict what I have before asserted. Inactive women, by reason that they lose more menstrual blood than others, and that the intervals between the menses are less considerable, become also more exposed to accidents that cause a sudden suppression. In consequence of their weakness, they are liable to the slightest impressions. I have seen one of these women obliged to keep her bed, on each return of the menstrual flux. If she exposed herself to the impressions of the atmosphere, the stoppage of the evacuation excited a swelling of the breasts; an oppression that yielded only to the letting of blood, and the remedies employed for re-establishing the ordinary course of Nature.

trary

trary. This question was proposed in the Medical Schools at Paris, in 1764, by M. de la Poterie, who concluded affirmatively. That Physician, after having defined the periodical evacuations, and described the principal symptoms that announce this event by a young girl; evacuations which he owns to be much more sensible by women than by men; pretends that these last, except this difference, and the quality of the symptoms, equally experience, every month, a critical evacuation, of which he cited an infinity of examples. Among others, he related those of a merchant at Leyden, who, according to Freind, had, every month, an evacuation through the hemorrhoidal veins; of an Irishman, by the end of the little finger; of different subjects by the pores, or by vomiting, or by divers openings. Boerhave observed, that certain periodical complaints of the head can be ascribed to no other causes.

If it be recollected that the periodical evacuation has plenitude for its first cause, it will be admitted that, by plethoric and inactive men, a secretion, more or less considerable, of the superfluous humour must take place, and

that the suppression must give birth to accidents that, for several reasons, will be less serious than by women.

Some men have had the menstrual flux in the most marked manner. Zacutus Lusitanus has left us a very singular observation. It is that of a man, having no beard, who monthly experienced, during four or five days, a very considerable hemorrhage, from a part by no means formed for giving a passage to the blood; and if it happened that this evacuation was made with some difficulty, symptoms of the cholic, a complaint in the reins, and an extraordinary heaviness, necessitated him to have a vein opened in the foot, which re-adjusted this strange course, and dissipated the impending consequences*.

A shepherd was positively in the same situation, excepting that he approached more nearly the nature of the fair-sex, by a bosom as beautiful, and as well-formed, as that of a young woman of twenty years. He was not

* *Anecdotes de Médecine.* Tome II. Anec.
CXXXIII.

the only one of his family that had so singular an evacuation: his father and fifteen brothers all participated of this marvellous phenomenon*. It must have been very uncommon, because the blood circulates more freely in men than in women; and they having the basin narrower, and consequently but few arterial vessels distributing themselves there, the plenitude in that cavity is not ordinarily considerable. If, nevertheless, there is too much blood, it swells and distends the inward *hemorrhoidal* vein, and forms that tumour known under the name of *hemorrhoids*, by which men lose, every month, a thick and superabundant blood.

This species of hemorrhoids supplies the place of the menstrual flux in men who have soft and weak vessels, thick blood, and a lax, spongy, and gross temperament; who live luxuriously, and pass their time in too sedentary a manner. They ought to guard against placing any obstacle in the way of this evacuation, which disburthens them of an inutile blood, capable of causing great ravages. The an-

* *Journal de Médecine.* Tome V. p. 280.

cients called this evacuation the *golden flux*, and not without reason, considering the advantages which it procures in several circumstances.

Sthal, after the Ancients, and particularly Hippocrates, well knew the efficacy of the hemorrhoids in many diseases; the same Sthal, who has left us the pills known under his name, and the property of which is to provoke the hemorrhoidal flux. The Germans, and the people who inhabit the north, are so much convinced of the utility of the hemorrhoids, that they have recipes which they employ for the purpose of making them flow, when they do not appear*.

We find, in the *Transactions philosophiques*, an observation that suffices for demonstrating the danger to which men expose themselves by striving to suppress any evacuation whatever,

* We may consult, on this subject, the *Traité de Médecine*, &c. by M. Robert, tome II. chap. IV. The observations which this Chapter contains, are very interesting; and support, with force, that which we have advanced.

tending

tending to establish the health. A young man, twenty-four years of age, had, from his infancy, an hemorrhage at the thumb of his left-hand, and from whence the blood flowed regularly every month, to the quantity of four ounces. In his sixteenth year he lost eight ounces; and, notwithstanding that loss, he continued in good health, and was not weakened in the smallest degree. In short, at the age of twenty-four years, he determined to lay a hot iron on his thumb, hoping, by that means, to turn the course of the blood; but he paid dearly for this experiment. After that time he was never well; on the contrary, he became subject to spittings of blood, which exhausted his strength; to violent colics, great weaknesses, and several other diseases*.

Must we conclude, after these facts, that men, even as women, are subject to a periodical evacuation? I dare not assert it; but I believe that, considering the manner in which we actually live, each individual, and particularly him who does not sufficiently exercise

* *Transactions philosophiques*, ann. 1701. See also the same Collection, ann. 1615.

the corporeal faculties, has occasion to procure himself an evacuation, from time to time, for replacing, in the animal economy, that equilibrium which is necessary to maintain it in good order. This evacuation must be less sensible in the laborious countryman, than in persons of every other description. Among sedentary artisans, it is an absolute necessity; and they languish, when this evacuation has not place. Literary men, persons of the polite world, religious devotees, in short, all those in states which are nearly inactive, find themselves in the same predicament as the sedentary artisans. If every individual attached himself to the study of that which passes physically in himself, (and that study consists in an observation which is easy to make) he would discover, in his constitution, the means of fortifying the temperament. Such a man, if he is careful in this respect, will perceive that the vague dolors which he feels at particular times of the month, announce the necessity of some kind of evacuation, which he must favour. Thus is it also situated with drowinesses, megrims, lassitudes, and dimnesses, to which other persons are subject from time to time. If, instead of
keeping

keeping in bed, and calling in the aid of a physician for slight indispositions, we were to consult Nature, we should find ourselves infinitely better; for the bed is, above all, prejudicial to men of the present day—— We are fortunate that, in proportion as we remove ourselves from Nature, real Physicians approach her more nearly in the principles of their science!

Although I dwell rather long on the object under consideration, I am not afraid of being reproached with deviating from the plan which I have proposed. I conceived it my duty to speak of the indispositions which affect men, when they have relation to the periodical evacuations of women. So far from deeply examining this object, I have only touched it superficially; but, from what I have said, some of my readers, perhaps, will feel a desire to know more on the subject. To acquire that knowledge, however, they have no occasion for books; they will find, in the study of their temperament, all that can be desired; and the cause of their indispositions being once known, it will be easy to employ an effective remedy.

The

The females of the brutes are not subject to a periodical evacuation like women*: and it is not difficult to explicate the cause of that difference. The vessels of the matrice are harder in animals; and, consequently, these vessels are not sufficiently dilatable for admitting more fluid than they ought to receive. Moreover, the animals are nearly always in a horizontal situation, which must occasion a more equal circulation than in women, whose perpendicular posture allows the flowing of a greater quantity of blood towards the generative parts, and renders its return less facile. Although the animals, in general, use a great deal of nourishment, the exercise which they take, prevents them from having too great a quantity of blood; and nothing can more clearly prove what I have previously said, in speaking of women whose menses are too abundant, than that which we observe in the females of the brutes. It is very seldom that they have an abortion, because the vessels of the matrice have not to resist, so frequently,

* We must except the females of some species of apes.

the impulsion of the superfluous blood, that forces and distends the vessels in which it is contained.

I shall terminate this Chapter by a reflexion, that the miserable state in which I have seen some young women from the first appearance of the menses, has enabled me to make. It seems to me, that some precautions ought to be taken, before the first evacuation of the menstrual flux, that it might not terrify those in whom it occurs.

I once saw a young person at the point of death, in consequence of not being apprised of what would befall her. The Nuns who surrounded this unfortunate girl, confessed to me, that some imprudent women had amused themselves with her astonishment, and her terrors! — She, however, lived four years after this occurrence, enjoying a precarious state of health; and died, at length, of the cruel consequences which followed a new suppression, caused by that terror. Almost every physician can give many observations of a similar nature; and ought not these afflicting catastrophes to inform a mother what course she should

should pursue in order to prevent such melancholy accidents? Many inutile things are said to children! But why are they not made acquainted with that which must pass in them as the age of puberty approaches! Why not arm them, by explanations prudently managed, against the surprise, the sorrow, and the apprehensions, to which delicate and sensible girls are exposed, in critical moments, that may have an influence on the happiness of their future days!

CHAP. VIII.

ON GENERATION.

‘ NO person will presume,
‘ that I have pretended to discover the mystery
‘ of generation: it is still veiled to the eyes
‘ of the greatest Physicians*.’

The universe, issuing from a chaos, at the voice of the Creator, was peopled, (at least the globe which we inhabit) with animals, whose species are conserved by a prodigious

* M. Bonnet’s Preface to *Considérations sur les Corps organisés*.

succession

succession of generations. The most imposing spectacle, and the completest proof of the existence of the Author of Nature, is that astonishing quantity of species in the animal kingdom, multiplying the individuals of each of the classes that compose them, with that admirable proportion by which each species conserves itself in the midst of a general destruction. The species is preserved, while the individual dies; for he does not disappear, till after having, in some sort, transmitted his existence: it is a tribute which he owes to Nature, before he returns into the mass of annihilated beings.

The function by which an individual produces his likeness, is that which we in general call *reproduction*; an expression which may be applied to the animals, to the vegetables, and which ought to be extended even, according to some authors, to the third kingdom of Nature*. The reproduction of animals is

* Pliny informs us that, among the ancients, there were some who believed that stones produce other stones. M. Peiresc, among the moderns, renewed this sentiment; and M. Tournefort has supported it, aided

that which we call *generation*; and it absolutely demands, in nearly all animals, the union of the male with the female. I say, in nearly all animals, because there are some that reproduce their species without the means of this union. The greatest part of fishes, (though the two sexes concur to this reproduction) the grubs, the polypuses, (these last even multiply by planting) prove that there may be some species of animals in which the union of the sexes is not necessary to reproduction.

The conjunction of the man with the woman, which is absolutely necessary for generation to have place, produces an individual that will resemble the sex of the one or the other; but which of them is it that produces,

aided by a number of observations: he even shewed, at the Academy of Sciences, pieces taken from gold, silver, and copper-mines, of so singular a structure, that it was difficult to explicate their formation without having recourse to the hypothesis of the *germs*. See, on this subject, *l'Histoire de l'Académie*, ann. 1702. *Ibid.* 1708 & 1711. *Transactions philosophiques*, 1684.

particularly, this individual ? Was it in the liquor which the male had transmitted during copulation ? Did that liquor find, in the matrice, an egg ready to become fecund ? Did the woman, in sharing the transports of the man, mix with his seminal humour a fluid capable of producing an organised being like herself ?

These questions must remain insoluble as long as the greatest Physicians disagree on the absolute essence of the seminal liquor ; and what I have exposed elsewhere, demonstrates how much opinions are divided on this subject. Nevertheless, the precise knowledge of our origin depends on that unanimous accord. If man is contained in an egg, deposited in the ovaries, the system of the organic particles falls of itself ; but, again, if we demonstrate that the female does not contain eggs, we must abandon the ovaries, and, in their place, accept the testicles, which, as in the male, filtrate and prepare an actual seed. In pursuance, we must suppose, in that seed, either the entire man, or only in parts which, by uniting to each other, concur in forming an animal like the one to whom the seminal liquor

liquor appertains. Does the man swim, entirely formed, in this liquor? In that case, from whence comes he? Where was he, when the particles of the seminal fluid were yet in the germ of the aliments which the earth inclosed in her bosom? Is this fluid composed of an infinity of living particles, that, by a force with which we are unacquainted, assimilate between themselves, and, at length, form an organised whole? — I should even prefer to admit, that man proceeds, entirely formed, from the hands of the Creator, rather than have to explicate, in a convincing manner, the arrangement of all these parts. I might mislead men who, in the animal, see scarcely any thing more than the exterior; but I dared not say to the Anatomist, that this astonishing preparation of fibres, of membranes, of vessels, of ligaments, of tendons, of muscles, of veins, of arteries, &c. which enter into the composition of the body of an animal; the structure, the relations, and the action of all these parts; this Whole, thus composed, thus knit together, thus harmonious; that all this is formed by the simple concurrence of particles, set in motion or directed according to certain laws, of which we are ignorant.

That which passes during the union of the sexes, enables us but little more than the systems, to discover the mystery of generation; for it is by no means in the extasy of pleasure that man observes: and even if it were in his power, he could not advance much further, by reason of the bounds that would necessarily arrest his operations. Nevertheless, 'I believe that discoveries might be made, with relation to this object, as well as in agriculture. A philosopher builds an hypothesis in the recesses of his closet, while it is *on the fact* that he ought to study the operations of Nature. The man who observes, will go farther than the man who attaches himself to the production of a system*. Moreover, a single man is unable to make observations on which we can reasonably depend. I would,

* ' There are two classes of literati: there are
 ' some who frequently observe without writing; and
 ' there are also those who write without observing.
 ' We cannot too much augment the first of these
 ' classes, nor, perhaps, too much diminish the second.
 ' A third class is still worse; it is those who badly
 ' observe.' *Letter of M. Haller to M. Bennet.*

if to know the manner in which generation occurs, imports the happiness of man, and of which there are doubts; I would, I say, have every-one admitted to communicate such discoveries as they may have had an opportunity of making. To this it may be objected, that there are but few capable of attaching themselves to these objects. — There is sufficient for reversing all the hypotheses of philosophers, if we could interrogate men on the remarks which they have been enabled to make, or that they hereafter will make, on the *discoveries* which are communicated to them.

By this means, we should quickly know if the liquor which issues from women is essential to generation; and many a Physician would be compelled to build another system, if he perceived that the greatest part of women who sacrifice to love from obedience, without partaking of voluptuousness in any manner, are those to whom the State is most indebted. We should then know, also, the circumstance under which spouses succeed the best in their undertakings. For example, in supposing the emission of both sides, we should know if it is necessary that it take place at

the same time; and why certain spouses, egotists in enjoyment, do not fail to render their wives fecund, although these occupy themselves but little with pleasures in which they feel no interest. We should likewise know, and it must be confessed that this would greatly affect the authors of certain systems; we should know, I say, that there are some women, ardently inclined to pleasure, who have only been able to conceive in certain moments, when they desired nothing less than the caresses of a spouse; caresses which they failed to return in any manner whatever. — We should know in short, like Socrates, that we know nothing; and we should be obliged to recommence with new systems, or greatly retouch the ancient ones at least, in order to render them conformable with the observations made by *men of science*.

We might then apply to generation, these words of M. Scheuchzer. ‘ We are too
 ‘ hasty in building systems, the materials of
 ‘ which can be furnished only by experience.
 ‘ We must have made many proofs for esta-
 ‘ blishing one system properly: to act other-
 ‘ wise, is to build without materials. — Let
 ‘ us

‘ us multiply experiments; we may think on
 ‘ a system of physic, when we have a com-
 ‘ plete Natural History*.’ ‘ We are obliged,’
 said M. de Fontenelle, a long time since,
 ‘ to consider the sciences at present as lying
 ‘ in the cradle, at least the science of Physic.
 ‘ — *Systematic* Physic ought to desist from
 ‘ the erection of edifices, till *experimental*
 ‘ Physic shall be in a condition to furnish her
 ‘ with the necessary materials. — ‘ There is
 ‘ no general system adopted, from a fear of
 ‘ encountering the inconvenience of precipi-
 ‘ tate systems, with which the impatience of
 ‘ the human mind but too aptly accommodates
 ‘ itself, and which, once established, opposes
 ‘ itself to succeeding truths†.’

If it be not objected to me, that men have
 exercised sufficiently long on generation, for
 being enabled to expose its mysteries with a
 certainty of having accomplished the end; I

* See the Work of M. Scheuchzer on *Plants
 before the Deluge* — *les Mémoires de Trévoux*,
 Jan. 1713.

† *Histoire de l'Académie des Sciences*. See
 the Preface.

shall contend, that we are very far from knowing enough of it, even to hazard any opinions. We do not yet know, what of the man, or of the woman, immediately contributes to generation! There is not even an agreement on this question: 'Has the woman a particular seed, or not?'

By casting an eye on some of the systems which the vanity of explicating all the operations of Nature, has induced men to imagine, we shall see how greatly ideas have been changed on the creation of each of these systems; and whether we are much more advanced at the present day, than they were in the time of Aristotle, relatively to generation.

That Philosopher* adopted the system which admits the man, solely, as the principle of generation, and thereto furnishing the prolific liquor; a liquor, according to him, that is not found in the woman, or, at least, that contributes nothing to the formation of the

* *De Gener. Lib. I.*

fetus. It is the menstrual blood which Aristotle considered as necessary, in the woman, for generation; it serves to the formation, to the developement, and to the nourishment of the fetus, but the efficient principle exists solely in the liquor of the male, which operates, not as matter, but as cause*.

One part of philosophers, who followed the opinion of Aristotle, have searched, as Avicenna, for reasons to prove that females have no prolific liquor; and they absolutely regarded the menstrual blood as the sole liquor furnished by females for generation. The seed of the man was only considered, by them, as an agent capable of communicating to the menses a movement from whence an individual receives life. Some have advanced, that the menstrual blood is sufficient for the formation of the animal, and that the seed of the man gives it life; that, in a word, this liquor contains the soul, and that it is conveyed into the fetus by the man,

* *Histoire Naturelle*, tom. IV. Aristot. *Hist. Anim.* lib. VII. cap. XVII. *De Generat. Animal.* lib. II. cap. IV.

Hippocrates, rejecting the opinion of those who had preceded him; an opinion in which the man possessed the sole advantage, while the woman was destined to give, alone, the place where the embryo must be deposited; Hippocrates, I say, believed that the concourse and the mixture of the two seeds were absolutely necessary to the formation of the fetus. He founded his assertion on the following reasons.

1. The woman emits seed as well as the man.
2. She experiences the same voluptuousness.
3. Tendernefs for the children is equal on both sides.
4. The children not only resemble the father, but the mother, in figure and character*.

* Hipp. Lib. *De Genitura*.

This system, which is much more followed than that of Aristotle, since it has passed to us, and still finds its sectators, is rested, as may be seen by the previous assertions, on fundamentals that are not unshakable, while the moderns have reversed them for establishing a new theory. Hippocrates also believed that the male children are produced from the liquor prepared in the right testicle of the man, and in the ovaries of the same side in the woman; and that, on the contrary, the females derive their origin from these same parts, situated on the left side.

An observation made by M. Belhing, in 1736, would singularly favour the system of Hippocrates, if other observations did not shew us its inconclusiveness. In a woman who died in child-bed, after having given birth to nine sons, without having ever had any daughters, the right ovary was found in a very good state, while the left, on the contrary, lean and decayed, appeared no otherwise than as a web of dried membranes*. With

* *Chirurgical Dissertation*, published at Altorf, December 22, 1736, by M. Belhing, on a matrice that

regard to men, we know, and I have mentioned it elsewhere, that those who are deprived of one testicle may equally engender males and females. Cyprianus speaks of an animal fetus which the surgeons were obliged to extract from the right trumpet of the mother, who survived the operation, and who, the following year, had twins, a male and a female; nevertheless, there was every reason to presume that the operation had destroyed the opening of the right trumpet. Thus the system of Hippocrates, which assigns a side proper to each individual of the different sexes, can derive no support in the preceding observation.

Harvey pretends, according to his observations, that man, and all the animals, come forth from an egg: the only difference between them is, that some issue from the mother while contained in their shell, and that the others derive their origin, acquire

that was opened in the pangs of delivery. See *la Collection des Thèses Medico-Chirurgicales*, &c. collected and published by M. Baron of Haller, and digested in French by M. Macquart. Tom. II.

their

their accretion, and reach to their entire developement, before they leave the matrice. All female animals have eggs, in which there is a crystalline liquor, where the formation of the animal commences. It will be seen, by what follows, that several physicians have believed, that the fetus, wholly formed, is contained in the egg, and that generation is no more than a successive developement of the parts of the animal, occasioned by the action of the feminal fluid. But Harvey, was by no means of this opinion. Generation, according to that Anatomist, is the work of the matrice; the seed of the male never enters it; the matrice conceives the *fetus* by a species of contagion which the liquor of the male communicates to it; the female is rendered fecund by the male, as iron, after it has been touched by the loadstone, acquires its magnetic virtue; in short, Harvey, despairing to give a clear and distinct explication of generation, compared the fecund matrice to the brain. ‘The one,’ says he, ‘conceives the fetus, as the other the ideas which form themselves in the head.’ A strange explication! exclaimed M. de Maupertuis; and which must greatly

greatly humiliate those who would penetrate the secrets of Nature*!

The discovery of the eggs excited a great fermentation among Naturalists. Stenon pretended to have seen them first; but Graaf and Swammerdam dispute this glory with him. M. de Buffon says, that the greatest part of Anatomists have given the name of *ovaries* to the testicles of the woman, and that of *eggs* to the vesicles which they contain. We have already seen that the eggs do not signify any-thing in the system of this celebrated Naturalist. However it may be, these Anatomists considered the eggs as the first cause of generation. These eggs are of different sizes, even in the same ovary: the greatest in the ovaries of women are scarcely as large as a small pea; and they are very small in young persons of fourteen or fifteen years of age. Some Authors have even asserted, according to these observations, that lascivious girls sometimes imitate the hens when they lay their eggs; and that this is

* *Vénus physique*. Chap. VIII.

sufficient, in an amorous mind, for shaking these little eggs, for detaching and causing them to fall *. These eggs are small, and unfruitful, but age, and familiarities with men, make them prolific. More than twenty of these may be counted in each ovary: there they are rendered fecund by the spirituous part of the liquor which the man sheds during copulation; afterwards they detach themselves, and fall into the matrice through the trumpets of Fallopius. Thus the fetus is formed of the interior substance of the egg, and the *placenta*, of the exterior matter.

Vallisnieri essayed to reverse the system of the eggs, such as it is here presented, by insisting that the vesicles found in the testicles of all females are not eggs; and that they are nothing else than the reservoirs of a lymph, or of a liquor that must contribute, says he, to the generation and to the fecundation of another egg, or of something that resembles an

* See *les Commentaires de M. de Haller sur Boerhave*, tom. V. part. II. The *Bibliothèque raisonnée des Ouvrages des savans*, for the months of January, February, and March, 1751. Art. XIII.

egg, which the fetus, entirely formed, contains. Malpighi coincides with Vallisnieri, as to the testicles of the woman. But it is very singular, that Vallisnieri, after a great many observations, concludes that the work of generation takes place in the testicles of the woman, which he always regards as ovaries, says M. de Buffon, though he never found any eggs there, and that he has demonstrated, on the contrary, that the vesicles are not eggs*.

These contrarieties did not prevent Vallisnieri from giving credit to the pre-existence of the germs, which I have already noticed, and asserting, with many other physicians, that the eggs of the whole human race, to the extinction of the species, were contained in the ovary of the first woman.

To the system of the eggs has been opposed that of the animalcules or spermatic animals, which so many observers assert they have discovered in the feminal liquor of the

* *Histoire Naturelle.* Tome V.

two sexes. I shall not here repeat what I have observed on the subject of the animalcules, or spermatic animals, in the Chapter on the *Seminal Liquor* *. I shall solely expose, in few words, the manner in which a celebrated Physician † has explicated the hypothesis of generation by the *spermatic worms*.

We must admit, in the seed of the male, those little animals, against the existence of which the strongest objections may be formed. We must also admit the eggs in the female, for receiving the worm contained in the seed of the male; and then all will appear favourable to the hypothesis in question.

The egg, or the vesicle furnished by the woman, comprehends all the *after-birth*, that is to say the *placenta*, and the envelopes of the fetus. The worm furnished by the man, makes, properly, the fetus, and the woman provides the nest. As soon as the conjunction has been made, and the seed is received, the matrice closes. The seed therein con-

* See Chapter V. of this Volume.

† M. Astruc, formerly Professor of the Royal College.

tained, does not remain there any long time; it is absorbed by the pores, or rather by the great number of lymphatic vessels, which are destined to pump the liquors; it penetrates the blood, and no one portion of it remains in the matrice. How, then, can generation occur? See here.

The seed disappears, and is absorbed, but the spermatic worms keep their station; they remain in the matrice, where they are conserved, since the substance of this viscera, and its temperature, are pretty nearly analagous to the qualities of the testicles. It must not be supposed that the seed of the man becomes inutile after having transmitted the spermatic worms into the matrice: that liquor, when it has penetrated the paths of circulation, and traversed all the parts of the body, must necessarily be carried into the ovaries, for rendering the eggs fecund, and to further their growth. As soon as these are penetrated, there occurs a fermentative or oscillatory movement, which occasioning a swelling of the ovary, it bursts towards the thinnest part, or rather opens on the side that is turned towards the tube of the trumpets. We easily conceive,

ceive, that some of the vesicles must then detach themselves from the ovary, and fall into the trumpet. If one only detaches itself, there will be no more than one fetus; in certain circumstances, there will be two; and so of the remainder. That vesicle having reached the matrice, floats in the lymphatic serosity there confined from the closing of its orifice; and there it floats in such a manner, that the heaviest part will be lowest, and the most light above: it is probable that this part is destined to form the *placenta*. The vesicle floating in the matrice, is soon surrounded by a great number of small vermicules, which endeavour to gain admittance, although no more than one only can introduce itself there. But it must not be supposed that it introduces itself blindly, or by chance: that introduction may be easily conceived, if we suppose in the vesicle a cavity proportionable to the body of the little animalcule; for example, a small hole with a *valve*. As soon as the worm has entered that cavity, the supposed valve will shut; and the other vermicules, excluded from thence, can no longer maintain their position. Thus we see the little vermicule in the envelope, and fecundation achieved. The

U .

envelope

envelope insensibly augments by means of the nourishment which it receives, and fills, through a continual increase, the cavity of the matrice to which the *placenta* attaches itself.

Boerhave — who, after the pretended discovery of the animalcules, or spermatic worms, still surpasses Leuwenhoek and Hartsoeker — has embellished the hypothesis which is here in question. The animalcules, arrived in the trumpet, declare open war; there they fight; and the strongest, after having strewed the field of battle with dead, and proud of his victory, remains alone to sport on the occasion, after which he loosens the egg, and conducts it into the *uterus*.

This ingenious hypothesis of the spermatic vermicules, as presented by M. Astruc, must have cost its inventor much; but then he had the advantage of resting on observations which, in some sort, served as proofs, on supposing that these observations were regarded as incontestable. Harvey says that he opened several hinds an hour after coupling, and never found any seed in the matrice; nevertheless, the hinds never fail to conceive.

conceive. The seed, therefore, does not remain in the matrice after the coupling. But why do the vermicules remain there? It is probable, according to Doctor Crarden, that the pores, which may admit the seed, cannot give a passage to the vermicules. The proof that the seed enters into the blood, is evident by the alteration which takes place in the flesh and the milk of females who have conceived. The flesh of the she-goat, for example, smells like the he-goat; and obtains, therefore, a bad taste from the mixture of the parts of the seed, which, having been received into the blood, circulates with it in all its course.

In adopting this hypothesis, attention must be given to the objection of which I have already spoken — Why so many inutile animals? What a superfluous consumption! This difficulty is answered, by saying: Is it for man to measure the designs of God in his works? This is a pious answer; but it is by no means satisfactory in an hypothesis where we must explicate all, or abandon the system. — I knew a Franciscan Monk, who attempted to make a new system on the

planetary *world*, and who, on finding himself disconcerted in his purpose by objections that were too strong, attributed an angel to each planet, to whom the Author of Nature had given orders from the commencement of the world, and traced the path which he must keep during the existence of the universe.

In the mixed system of the vermicules and the eggs, objections are also made against the resemblance of children, at one time to the father, and at another to the mother. It seems that the child must always resemble the father, if we alone admit the vermicules for the purpose of generation; or the mother, if we only admit the vesicles. With respect to the first resemblance, it is supposed that all the vermicules have the same conformation, the same mould, and the same mark as the man from whom they proceed: this is the resemblance as to the father. On the other side, it is supposed that the cell of the egg represents, in miniature, the conformation of the face of the mother; and it is easy, with the assistance of these two very gratuitous suppositions, to explicate the mechanism of the resemblance, if we, moreover, admit also another supposition;

supposition; namely, That nearly all boys resemble the mother, and girls the father. The male vermicules are larger than the female vermicules; thus, the vermicule which glides into the egg, must there naturally preserve its primitive form, and resemble the animal from which it originates. Let us imagine a figure entirely formed, and that is placed in a mould. If the vermicule exactly fills its cell, it will lose much of its primitive impression; and adapting its surface with the impression of the mother, imprinted in the egg, the child will resemble the mother, &c.

But if, as M. de Buffon pretends, the boys in general resemble the father, and the girls the mother, the explication of resemblances, by the system of the vermicules, will also prove unfounded; and the system will not be maintainable without great difficulty.

M. le Camus has also presented a system on generation*; and, according to this Physician, the formation of animals occurs in the

* *Mémoires sur divers sujets de Médecine*, 1760.

same manner as that of vegetables; they are reproduced from seed, the one as well as the other. The brain is, in the first, the source of their fecundity; it is no more than a grain of the *vegetable animal* that contains the generative principle of all animals. It produces small animated beings, as grains produce diminutive plants.

The seed, according to M. le Camus, is composed of small brains, which have emanated from the great brain of the animal. A drop of the prolific liquor injected into the matrice, swells there, and at first presents only a small brain, or a head, from whence the extremities must come forth, as so many branches, nearly as the lobes of a bean swell at first, for shooting afterwards the stalk and the root. These small brains proceed to the testicles by means of the nerves; and, according to this system, the great brain must necessarily be composed, even as the vegetable grain, of small embryos, that wait for a convenient place in order to develope themselves; for I do not think that the Author of this system, like Harvey, imagined generation to be the work of the matrice. The public will never favourably receive

ceive an hypothesis when the Author is forced to have recourse to metaphysics, for explicating the operations of Nature.

A System on Generation, very ingenious in many respects, is that of the celebrated M. de Buffon. It has, however, been opposed by several eminent Physicians, because it did not accord with their sentiments; but it must not therefore be less considered as the work of a sublime and enlightened mind, and whose wanderings even announce an imagination the most seducing, and the most capable of fixing the reader's attention.

It has already been observed that M. de Buffon viewed, in Nature, a matter common to vegetables and to animals, and composed of *organic particles*, that are animate, primitive, incorruptible, and always active. The movement of these particles may be arrested by the coarsest molecules of the *mixture*; but as soon as they begin to disengage themselves, they produce, by their reunion, the different species of organised beings which figure in the world. This matter, universally diffused, serves to the nutrition and to the development

ment of all that lives or that vegetates. The surplus of what is necessary for producing this effect, is conveyed, from all parts of the body, into a common reservoir, where it assumes the form of liquor. The organs of generation are this reservoir. The feminal liquor contains all the molecules analagous to the body of the animal; and, deposited in the matrice, it produces a diminutive being, entirely resembling the *interior mould*, of which the molecules make a part.

According to the new system, there are no pre-existing germs. The formation of the animal is the production of an unknown power, which, as that of weight, penetrates the whole mass. The fundamental law of this power is, that the organic particles which have the most relation to each other, unite themselves the more closely. In the union of the two individuals, the liquor furnished by the male mixes with that furnished by the female, and these two liquors then form no more than one only. The analogous or correspondent particles of this liquor, have a tendency to approach each other, and to unite, by virtue of their relations. And as these
particles

particles have been dispatched from the different parts of each individual, where, so to say, they are moulded, they conserve, in the seminal liquor, a disposition to represent these same parts. From thence results the formation of the embryo. With respect to the difference of sex, if, in copulation, the molecules furnished by the male surpass in number and activity those furnished by the female, the embryo arising therefrom will be a male; and wholly the contrary, if the female has the advantage in that act from whence generation results. From hence arises the resemblance, more or less marked, of children to the father or to the mother*.

By means of this system, the Author gives an explication of the differences which are observed in generation, not only with respect to man, but likewise animals of every class, &c. &c.

We must distinguish, among the learned men who have opposed the preceding system,

* See *l'Histoire Naturelle*. Tome III.

the celebrated M. Haller and M. Bonnet. The love of truth alone has actuated these two estimable men; and this is perceivable by the manner in which they propose their objections. The first does not assent to the reality of the organic molecules; he appears to believe that they are actual animals, but which have not, to speak properly, any direct influence on generation*. Is it not possible, says Baron Haller, that these animals were nothing else than insects that receive life in the perished juices? And do we not find great numbers of them in the seminal liquor, precisely because the vesicles of the seminal liquor, and the neighbourhood of the great intestines, are the most proper situation for putrefaction? If these vermicules exist, as M. Haller seems to have been persuaded, then we see vanish the organic molecules on which M. de Buffon has established his hypothesis.

The first likewise makes an objection on the resemblance of children to their fathers;

* M. Haller combats the opinion of M. de Buffon in a Preface to the second volume of the German translation of the *Natural History*.

and

and this objection is forcible: for M. Haller absolutely denies that resemblance. If I prove this point, says he, children will be no more the images of their fathers; and the remainder of the edifice will fall of itself. Let us omit that, on the examples which may be alleged of children that have a resemblance to their fathers, there is always a great number who have not the smallest trait or likeness of them: I go farther in my ideas. There is no man who resembles another, with respect to the interior structure of his body, and consequently there are no children who resemble their fathers. Anatomy, continues M. Haller, has informed me of a truth so lamentable; which has but too much multiplied my labours. If men resembled each other, we should then have occasion only for a single description, and one sole representation of the arteries of the hand: for example; if these drawings once resembled the original, it would always continue to be a resemblance. But Nature is widely distant from such an advantageous uniformity; there has never been two men in whom an infinite difference was not observable in every nerve, in every artery, in every vein, and even in every bone. After making fifty descriptions
of

of the arteries of the arm, of the head, or the heart, I have found all the fifty entirely different. — This variety prevails in the whole of Nature: never has a plant resembled that of which it has been the grain; which, nevertheless, according to M. de Buffon, must perfectly have place, since there is here no mixture of the feminal liquors of male and female, with which the one may affect the other. — The child is not, therefore, the image of his father; and if he were, might he not have parts of which the father is destitute? It is well known to Anatomists, that there are thousands and thousands of millions of vessels found in the fetus, that are no more in adult and marriageable persons. The fetus has two umbilical arteries, a vein of the same name, an *urachus*, a *thymus*, an oval hole, and a great many other parts, of which the father is destitute: it has a double row of teeth, while the father has no more than one.

But anatomy, says M. Haller, further, is by no means a light that shines for all the world: let us therefore illumine the torch of Nature, that casts some rays on the eyes
of

of those who are least enlightened, and view a Hottentot, who has no more than one testicle; a Swiss who, in his youth, has had one testicle extracted, by reason of the ruptures so common to that laborious people: this takes place, even according to M. de Buffon, long before the time that the abundant particles are returned for forming a feminal liquor. But this Hottentot, this Swiss, begets children, that are not destitute of any of the parts, and that have both the testicles. A man who has lost a hand, a leg, an eye, does not fail, nevertheless, to beget accomplished children. If M. de Buffon had been disposed to attribute to the mother that hand and that eye of the child, which the father wanted, the testicle at least would have exceeded the limits of her influence; and nothing more will remain for M. de Buffon than the having recourse to universal adultery among all nations; an accusation which would be too hard, and very improbable.

To these matters, M. Haller adds others which demonstrate, that a crippled, deformed, and disfigured father, begets healthy children, whose spine of the back have not the least resemblance

resemblance to that of the father; and that a bitch, shut up with a single male, both being deprived of their ears, will nevertheless bring forth young with complete ears, &c.

Another objection to be made against the system combated by M. Haller, touches the arrangement of the analogous organic molecules, for collecting themselves, and concurring to the formation of such or such a part. When we even suppose, for a moment, says this celebrated Anatomist, that the images of the intestines, the eyes, the ears, can assemble in the feminal liquor; when we even suppose that they conserve there the resemblance of the body from which they derive their origin; we shall nevertheless see these organic particles float without order in the feminal liquor: and M. de Buffon has not made any thing known as to the cause which places them in order, that joins the particles of the eye of the father with the particles of the eye of the mother, the right with the right, and these of the left side with those of the left side; that adjusts the particles of the ear in their place, and at their convenient distance; that measures with exactitude the situation

situation and the proportion of all the parts; that adjusts thousands and thousands separate moities of arteries, for making thereof a complete canal, which extends itself according to the length of the body; in a word, that orders the human frame in such a manner, that an eye never attaches itself to the knee, that an ear cannot fasten on the hand, and that a toe never wanders to the neck, &c. &c.

I should not imagine, continues M. Haller, that there can exist, between the organised particles of the seminal liquor, a difference, a form, that distinguishes the one from the other, and that separates the elements of the feet from the elements of the eye: and when I would even suppose, that the veins and the nerves, which can only be seen by the aid of the *microscope*, float in the seminal liquor, I should, nevertheless, find no power in Nature that can join together, according to a plan traced out from all eternity, the separate parts of the body, these thousand and thousands millions of veins, of nerves, of fibres, and of bones. It appears to me, that M. de Buffon has wholly passed over this great difficulty, somewhat like Timantes, who, instead

of painting the anguish of Agamemnon, thought to excuse himself by covering his face with a veil. M. de Buffon has here need of a power that has eyes, that makes a choice, that proposes to itself an end; that, contrary to the laws of a blind combination, performs, every time, and infallibly, the same act*.

It seems to me, that the objection which M. Haller here offers, loses much of its force, if we grant to M. de Buffon the *interior moulds*. If we acknowledge the possibility of these moulds, and admit that the seminal liquor alone consists of particles that have passed through the moulds, M. de Buffon has made the most difficult stride, and his system necessarily wins the reader's approbation. M. de Buffon felt this himself; and it is easy to perceive, from his manner of insisting on the possibility of the interior mould, that on this depends the explication of all the acts that accompany

* The greatest part of animals conceive in the first coupling, and always produce regular animals; in comparison of which, the number of monsters is so trifling, that it entirely vanishes when we examine it according to the rules of calculation.

general

general reproduction*. That celebrated Naturalist was well aware of the objections which might be made to the unknown power that, in the matrice, reunites all the parts destined to form the eye, the nose, the hand, &c. If we admit, solely, the laws by which the particles of living matter are compelled to mould themselves according to each part, shall we not be constrained to admit also an unknown force, that conserves in the molecules a tendency to approach each other, in proportion as they are analogous to the part which they must form? See we not with what art the formation of the fetus is explicated, by recurring to the principles established at the beginning of the work †?

* See Tome III. at the Chapter on *Reproduction in general*.

† On reading the Chapter which has for its title *de la formation du fœtus*, tome IV. of *l'Histoire Naturelle*, we see that M. de Buffon has not paid such little attention as M. Haller supposes, to the arrangement of the organic particles: but then it was unnecessary to dwell longer on the subject, since the laws that are elsewhere laid down, remove the difficulties.

M. Haller attacks this system with more success, by denying the existence of a feminal liquor in women; for M. de Buffon, in his hypothesis, cannot by any means supply the want of it, one-half of his edifice being built on this foundation, since, without a feminal liquor of the woman, no other than male children would be born, according to his system. I do not find, says M. Haller, the smallest proof of the existence of this feminal liquor; I cannot find any thing to convince me that the fair-sex possess it, or that they have such an emission, and that it mixes with the seed of the man*. The testicles of the male are proper to him from his infancy; they have reached their degree of maturity when he couples; and the prolific juice which the male sheds for the great work of generation, derives its origin in the testicles, which, a long time before, had been prepared for furnishing it. But females, and particularly the woman, have in no wise, according to M. Haller, these

* M. de la Mettrie has enforced, in his *Art de faire des garçons*, [Chap. II.] many of the observations which may be made against the existence of the feminal liquor in women.

glandulous bodies affirmed by M. de Buffon to have existence: every woman who dies without conceiving, has never had these testicles. At the time when a young beauty, healthy and marriageable, conceives, she is entirely destitute of the instrument of the pretended feminal liquor: from whence, then, does she derive the feminal liquor?

It is animals that engender rapidly, and at small intervals, which have induced M. de Buffon to believe that all females capable of generation have such glandulous bodies, and consequently feminal liquors and organised particles*: ‘but it is incontestable,’ says M. Haller, ‘that these glandulous bodies are not the cause, but the consequence, of fecundation.’ They do not arise in the woman till conception has taken place; after delivery, they are only conserved a certain time, for the purpose of disappearing gradually, and for never being repaired by other similar glandulous bodies, unless the woman conceives anew.

* See *la Bibliothèque raisonnée des Ouvrages des Savans*, for the months of January, February, and March 1784. Art. IV.

M. Haller opposes his experiments to those of M. de Buffon. ‘ I have opened,’ says he, ‘ without prejudice, and without any particular view, hundreds of women, as well old as young; and I do not think that I found the glandulous bodies more than ten times, and always in pregnant women, who were dissected in that state, or shortly after delivery.’

Other circumstances, and particularly the insensibility of many women, and many female animals, who conceive, oppose the opinion of those who believe that all women, and those even who are not uncommonly lascivious, emit a prolific juice in the act of generation. When they make this emission, it is certain that the liquor does not pass into the matrice, and consequently it cannot serve to the purpose of generation: for from whence should this seminal liquor reach to the matrice? ‘ Who has seen it?’ asks M. Haller; ‘ and who has ever found, in the body of the woman, any thing that resembles the seminal matter of the man?’

It

It may be seen, by this exposition, that it is impossible to conciliate the sentiments of two observers so celebrated as are M. de Buffon and M. Haller. How many objections might we still find to the system of the first, if I were to expose all which M. Bonnet has advanced for demolishing the explication of reproduction by the organic molecules *? It will suffice to say, that this Author, strongly inclined for the pre-existence of the germs, and not admitting, in any manner, the successive formation of individuals, but solely a continual developement of germs scattered throughout the universe, has very powerful reasons for combating the reunion of the parts, from whence an animal, a plant, wholly organised, must result. ‘That admirable machine, [man]’ says M. Bonnet, ‘was, from the beginning, designed in a small compass by the same Hand which traced the plan of the universe. When I would have essayed,’ continues he, ‘to form an organised body without the assistance of a primitive germ,

* See *Considérations sur les Corps organisés*, &c. tome I. chap. VII. VIII. IX. & tome II. chap. IV. &c. &c.

‘ I have always been so dissatisfied with the efforts of my imagination, that I clearly perceived the attempt was absolutely beyond its reach.’

M. Bonnet exposes the most esteemed systems on generation, and accompanies his reflections with matters that may render each of these systems probable. But, strongly prepossessed with the existence of the germs before conception, it is by no means astonishing that his powers are complaisantly directed to the support of this system.

M. Haller has observed, that the chick appertained originally to the hen, and that it existed before conception*. This discovery, announced in 1757, redoubled the activity of M. Bonnet, who continued his observations, so well presented in his work on *organical*

* See *Mémoires sur la formation du Poulet*, by M. Haller. It was also the opinion of Swammerdam; see *la Collection Académique; la Théologie des Insectes*; where M. Lyonnet maintains the same opinion in the notes which he has added to the text of Lefler.

Bodies. It results, from the experiments of M. Haller and M. Bonnet, that all beings are contained in the germs, which develope and increase, when they rencounter the convenient matter; that they cannot, nevertheless, develope themselves till they are rendered fecund; that the matter which causes fecundity, adds modifications to this developement, which affect the exterior and the interior of these germs; and that, in short, these modifications have always a relation, more or less marked, to the individual which operates fecundation.

Some Physicians, in admitting the hypothesis of *diffemination*; an hypothesis in which the unperishable germs of all that exists, are scattered in the elements*; have imagined that, by the mechanism of respiration, the woman draws in these germs contained in the air; that, by following the torrent of circulation, they reach the ovaries; and that the seed of the male, when arrived at that part, there renders fecund such of the germs as are best adapted to that purpose. It seems that, for

* I have spoken at greater length on this subject, in Chap. VI.

avenging themselves on Nature, who, perhaps, would conceal the mystery of generation from the eyes of men, these Naturalists have endeavoured to obscure this mystery still more by a system, the ridiculousness of which is sufficiently apparent.

I have only dwelt thus long on the sentiments of some celebrated men concerning generation, to prove that nothing in Nature, perhaps, is less susceptible of being unveiled than the immediate means which she employs for accomplishing her design. But here I may confidently say, that, for enabling an individual to raise his voice against the systems on generation, he must have studied with great attention, and have afterwards carefully opposed the one to the other.

Notwithstanding the observations of M. Haller and M. Bonnet, nothing, I repeat, is more seducing than the system which they combat with so much force. M. de Buffon necessarily fascinates us in the first perusal of his work: and if we afterwards examine the reasons, by the aid of which that great Naturalist supports his system, we are constrained
to

to admire the genius of the Author, who, without deviating from his first principles, has been able to explicate all the operations of Nature*. In admiring the great ideas of this celebrated man, the delicate and numerous observations which must have decided his system, it is doubtless lamentable, that human wisdom must acknowledge that generation still remains a mystery— Ah! why do we blush at this avowal? The sublime man of whom we speak, has himself said, in refuting the systems of other Naturalists— ‘ It is more easy to *destroy* than to *establish* — The question of reproduction is, perhaps, of a nature that *never can be fully resolved* — By conducting ourselves properly in this examen, we shall discover in it all that we can know

* Those who combat M. de Buffon, without possessing the inclination to understand him, pretend, that he has borrowed his system from Anaxagoras, Aristotle, and Hippocrates— but it is sufficient to read M. de Buffon, for granting that, in even supposing the first rudiments of his system had been exhausted by the ancients, it must have required an astonishing genius to draw from thence all the parts extracted by the Author of the *Natural History*.

‘ on the subject, or, at least, we shall clearly
 ‘ discern why we are ignorant of it *. If
 ‘ we do not so far succeed as to explicate the
 ‘ mechanism of which Nature avails herself
 ‘ for operating reproduction, at any rate we
 ‘ shall attain to something of greater *probability*
 ‘ than that which has been hitherto ad-
 ‘ vanced †.’

It is with this continual doubt on their minds, that great men attempt to develop the laws of Nature, and not with that affirmative tone which is only adapted to a mediocrity of talents. It is, moreover, with that modesty which M. Bonnet announces, when he says —
 ‘ I do not pretend to have discovered the
 ‘ mystery of generation: — it is still veiled to
 ‘ the eyes of the greatest Physicians §.’ I have followed the lessons of several celebrated Professors; they expose, with all the sagacity of which they were capable, the different systems on generation; and they finish, by not ad-

* *Histoire Naturelle de l'homme*, tome III, chap. II.

† *Ibid.*

§ See the commencement of this Chapter.

mitting any one of them; so true is it, that this mystery *is still veiled to the eyes of the greatest Physicians* * !

I shall not terminate this short exposition of some systems on generation, without annexing an anecdote, well adapted for demonstrating the absurdities to which human wisdom sometimes inclines, in order to support its opinions.

The doctrine of fortuitous generations had obtained so much credit, from the commencement of this century, that many persons were persuaded that a sole could engender a frog. These persons by no means considered that, in each class of animals, the species are the same; that Nature constantly follows

* M. Ferrein, among others, astonishes his auditors when he speaks on generation : they admire the memory, the justness of the reflections, and the force of the objections of this celebrated Academician ; he terminates his discourse by rejecting every system, and he considers the reproduction of individuals as a mystery, of which the Author of Nature has withheld the knowledge.

the

the great traits formed from the origin of the world; and that, as a very ancient romance-writer says —

From one grain of seed, behold th' cause
That each his true resemblance draws:
Man comes from man, and fruit from fruit—
Brute constantly succeeds to brute.

A well-known surgeon of London, named St. Andre, published the system of fortuitous generations in 1726; and he possessed, says Voltaire*, (from whom we borrow this fact) the enthusiasm of the new sects. One of his neighbours, a woman who was poor, but daring, resolved to profit by the doctrine of that Surgeon. This woman induced him to believe that she had been delivered of a coney.

St. Andre finding, in the declaration of this woman, a confirmation of his system, by no means doubted the adventure, and, with his adherents, triumphed at the occurrence. At the end of eight days, this woman was again delivered of a living coney in the presence of three witnesses. ‘St. Andre,’ says Voltaire,

* *Les singularités de la Nature.* Chap. XXI.

pleasantly,

pleasantly, ' shewed every body the sons of
' his neighbour. Opinions were divided ;
' some declared it was a miracle ; while the
' partisans of St. Andre said, that, according to
' the laws of Nature, it afforded matter of
' astonishment, that the thing did not more
' frequently happen. Men of sense were
' silent ; but every-one gave money to the
' mother of the rabbits.'

This woman found the trick so successful,
that at length she had a delivery every eight
days. The magistrates, however, interfered
with the affairs of this family : they discovered
a young coney which she had procured, and
which she had forced into an orifice that was
not formed for it.. ' The woman was pu-
' nished ; and the Surgeon concealed himself.
' The public papers drew a fund of mirth
' from that rabbit-warren ; as they did after-
' wards from the imposition practised by a
' man who enticed a crowd of spectators toge-
' ther, by pretending that he would go into a
' quart-bottle,' &c.

In the midst of so many uncertainties,
of systems which are raised, that run counter
to

to and destroy each other, Nature reproduces all beings; for its laws are invariable. While men strive to demonstrate that they sometimes owe their origin to a vermicule, sometimes that they are formed in an egg created from the beginning of the world, individuals are born, attain to a state of perfection, multiply, and die, without properly knowing, any of them, how all this occurs. It little imports man, therefore, to be instructed on these objects, since Nature has concealed them from him.

If we search for some light in the midst of that obscurity which covers generation, we shall see, (and on this point authors are agreed) that, for it to have place, the prolific liquor of the man must, to render the woman fecund, penetrate into the matrix, whether it be that the ovaries really contain eggs, or whether they inclose an actual seed. In whatever manner these things occur, it seems certain that generation depends on the action of the seminal liquor on the ovary; and that this action is operated during, or a little time after, copulation.

The

The circumstances which accompany the union of the sexes, can alone enable us to suspect what passes in the woman's internal parts, that concur to the propagation of the species.

In the most sensible moment of copulation, the circumstances by which it is attended, communicate to the organs of the woman an impulsion which is necessary for fecundation. The matrice, [Pl. I. fig. 3. Pl. IV. fig. 2.] experiences a species of convulsion, that is quickly communicated to the trumpets of Fallopius, [Pl. IV. fig. 2. No. 3.]; and these swell, and are stretched by the action of the musculous fibres, which enter into their composition. The fringe of the trumpet, [4, Pl. XII.] adhering to the ovary, encircles it; and when the seed of the man is lodged in the *uterus*, the matrice, through its agitation, drives a part of it into the trumpets. These, susceptible of the same agitation, convey to the ovary that portion of the seminal liquor which has reached them. The seminal matter instantly makes an impression the first egg which it encounters. I say *egg*, because we must, as far as it is possible, rest on something,

in order to trace the developement, or the formation, of the fetus*.

The feminal liquor, having reached the egg, gives to its slimy substance an effervescent movement, a species of inflammation, which makes it swell. The egg, thus rendered fecund, quits the ovary, by gradually tearing, through its increase of bulk, the slender strings which attached it thereto. It is immediately received by the trumpet, whose fringed part [4, Pl. XII.] has remained close to the ovary; and as this trumpet contracts, through the presence of the egg, its movements of contraction, it gradually drives the egg into the matrice. [4, 3, 2, 1, Pl. XII.]

Several observations prove, evidently, that the egg may be rendered fecund in the

* If the emission of a prolific liquor be admitted in the woman, that of the man may be dispensed from ascending to the ovaries, which must then be called *testicles*, and by the mixing of these two liquors the fetus will result. See, on this subject, chap. X. vol. IV. of *l'Histoire Naturelle*.

ovary,

ovary, and that there it may even obtain its accretion *. Fecund eggs have been seen, that escaped from the ovary, and fell into the lower-belly †; and others that, having taken the route of the trumpet, there remained §.

The matrice, then, is the place in which the fetus is ordinarily inclosed. It is there that the egg continues to swell, after it has left the trumpet. When it is become large enough to attain to the coats of the matrice, it is attached thereto by small filaments, which imperceptibly augmenting, form the *placenta*.

* See the famous observation communicated to the Academy of Sciences in 1701, by M. Littré. It has for its object an embryo that was fecundated and developed in the ovary.

† See *l'Anatomie* of M. Verdier, tome II. chap. XI. art. 2. *Le Journal des Savans*, an. 1696. *Les Nouvelles de la République des Lettres*, 1686. *Les Ephémérides des curieux de la Nature*, Dec. II. 1688, observ. 10, &c.

§ See *Mémoires de l'Académie Royale des Sciences*, an. 1702 & 1715. The *Anatomy* of Dionysius, Bartholinus, Riolanus, &c.

[3, fig. 1; 4, fig. 2, Pl. XIII. & 1, Pl. XIV.] But before this developement, we discover a vein and two arteries, that begin to form a small umbilical string. It reaches on one side to the navel; and, extending gradually, it joins the vessels of the matrice, for establishing a circulation between the mother and the infant, by means of the vessels which form this umbilical string, [6, 6, Pl. XIV. 8, 8, 8, *ibid.* See also fig. 1, 2, Pl. XIII.] and which open in the *placenta*. [2, 2, 2, 2, Pl. XIV.]

The fetus passes slowly through several gradations. [fig. 1, 2, & 3, Pl. II; fig. 1 & 2, Pl. XIII.; and 8, Pl. XII.] Three or four days after the egg is fructified, we observe nothing in the matrice, except an oval and transparent bubble, filled with a lymphatic humour, resembling the white of an egg; and in its middle is a darkish spot, more opaque, that must form the embryo. Seven days after conception, we distinguish, with the naked eye, the first lineaments of the fetus, in which we discover, faintly, the head and the trunk, denoted by two vesicles: as yet, the extremities cannot be seen. In fourteen days, we distinguish the head and the most apparent traits

traits of the visage: the nose appears under the form of an elevated thread, and perpendicular to a line that shews the separation of the lips. We discover two black points at the place of the eyes; two small holes at that of the ears; and we see on the two sides of the superior part of the trunk, little protuberances, which are the first signs of the arms and the legs. These first sketches of the extremities sometimes remain behind, and Nature stops in the progress of her labours; it is then an infant without arms and without legs.

At the end of three weeks, the body of the fetus is a little augmented: the arms and the hands, and the legs and the feet, are distinguishable. Towards the end of the first month of pregnancy, the fetus [fig. 1, Pl. II.] is an inch in length; it has decidedly the human figure; all the parts of the face are discoverable, the body is designed, the haunches and the *abdomen* are elevated, the members are formed, the toes and the fingers are separated from each other, and a cluster of fibres denote the viscera. At six weeks, the fetus is longer, the human figure begins to attain,

Y 2

attain perfection; and the head is proportionably larger than the other parts of the body.

Two months after conception, the fetus [fig. 2, Pl. II. & 8, Pl. XII.] is two inches and a quarter long; at three months, three inches and a half; and, at four months and half, five inches. At that time, all the body of the fetus is so much augmented, that we can very easily distinguish in it all the parts, and may even see the nails of the fingers and toes. It always augments, more or less, to the ninth month, when it is about one foot two inches long. [fig. 1, 2, Pl. XIII.] It must, nevertheless, be acknowledged, that it is difficult to ascertain the dimensions of these parts, since a considerable variation is found in the measures, according to the diversity of subjects. Children are born from twelve to eighteen inches; and there has been an infant seen, who, on coming from the womb of its mother, weighed forty pounds*.

All the time that the fetus remains in the matrice, it is encompassed by two membranes,

* *Dictionnaire raisonné d'Anatomie*, art. GENERATION.

named the *Chorion* and the *Amnion*: [3, 3, 3, 3, Pl. II. fig. 1. 2, 2, 2, fig. 2, Pl. *ibid.*] the last contains the water in which the infant floats; and these envelopes preserve it from exterior injuries, which are rendered still less sensible by the surrounding water.

The lungs are not of the smallest use to the fetus; we may presume so at least, since the fetus does not respire. It receives nourishment from the mother by an established circulation between the vessels of the matrice and those which lead to the umbilical string, [8, 8, 8, Pl. XIV.] by means of the *placenta*. [1, Pl. *ibid.*] It is true, infants have been seen who were destitute of this string; but then it must be granted, that the fetus was enabled to increase and to obtain nourishment by a species of imbibition, an absorption of humours, by means of the multiplied pores of the skin.

The infant, formed in the matrice, is more immediately submitted to the examination of Anatomists: disasters happen but too frequently to pregnant women, from which Art derives lights that serve to the history of the

fetus. It is by these means, that numerous observations have established the particulars which we have very succinctly stated.

Although we may say that conception is the work of Nature, it has been seen, by what we have remarked, that it is also the work of men. Nature actively tends to the reproduction of beings; but she cannot operate in several circumstances, of which we have already spoken. The infant in the matrice is still entrusted to Nature, who, nevertheless, cannot deviate from her laws, when men endeavour to abolish them. The air, the aliments, the passions, the manners, and prejudices, have all an influence on the infant confined in the womb of its mother. It comes from thence with difficulty; when, more immediately exposed to exterior agents, it requires new sollicitudes — Nature is always attentive to him; while those to whom he owes his existence, either neglect him, or, by a misplaced tenderness, lavish on him that which operates to his disadvantage. A father and a mother have not, then, discharged their entire duty when they have succeeded in the formation of a being: while yet in the matrice, it demands

mands the most scrupulous attentions; and as soon as it is born, the authors of its existence ought to unite their efforts for assuring its happiness.

Thus has the Creator of all things established Laws for the conservation of animals that inhabit our globe. We have seen man pass from infancy to puberty; and have remarked that Nature, from that period, prepares in every individual the fecund germs that contribute to the propagation of the species. In pursuing the individual through his different ages, we have constantly been enabled to see what Nature has accomplished for the purpose of rendering him happy, if he does not violate the simple laws which she has prescribed him. But we have also been enabled to remark, that those who disregard these sacred laws, under the supposition of increasing their happiness, become a prey to infirmities, the ordinary consequences of an abuse of pleasures. This prodigality of the powers of man gave us infinite concern, as we placed before our eyes the miserable individuals who, in the prime of their days, present to death a countenance on which are imprinted the characters

characters of impuissant debauchery. From these frightful phantoms, we have passed to the vigorous old men who, having spared their powers in an age that seems to dictate to the passions, glide slowly towards their tomb, with a serene visage, conducted by Nature, and smiling still at Love. From time to time, we have cast an eye on the felicity which results from the union of the sexes, when it is cemented by Religion and the Laws. We have seen what an influence this sacred union has had on the morals of Citizens, and on the greatness of States ; and how agreeable it is to Nature, whose works announce, every-where, the sublimity of the duty which she imposes on every individual, of perpetuating his existence. In short, we have shewn, in this Work, the morality of Nature united to Religion, relatively to the propagation of the species ; and, if we prove useful, it will sufficiently recompense our labours.





ANATOMICAL
DESCRIPTION
OF
THE PLATES

CONTAINED IN THIS WORK.



PLATE I.

THE figure represents the head and the trunk of a Woman, where the four extremities are cut close to the principal articulations, and in whom the lower-belly is open, for shewing the essential parts of generation, and others which have some connexion therewith.

1. The two reins in their situation, with the vessels which enter there, and issue from thence.
2. The bladder reversed on the side, in order to leave the matrice visible in its situation.
3. The

3. The Matrice.
- 4 4. The ovaries, and the spermatic vessels which border on them.
- 5 5. The spermatic Vessels, before they are united for forming the spermatic cordon.
6. The vulva, or orifice of the vagina.
7. The trunk of the inferior aorta above its bifurcation.
8. The trunk of the *vena cava*.

The details necessary for obtaining a knowledge of these parts, and their functions, are given in Chapter III. of this Volume.

PLATE II.

The figures of this Plate shew the gradations by which the Fetus passes, when it is in the matrice.

FIGURE I.

An Embryo of three weeks or a month in its membranes, opened in four parts. We there see the developement of the *placenta* and the umbilical-string, which leads to the navel of the fetus.

1. The

Fig. 1.



Fig. 2.



Fig. 3.







Fig. 1.

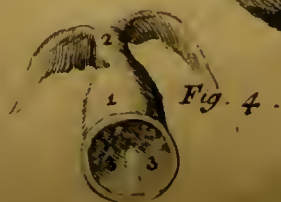
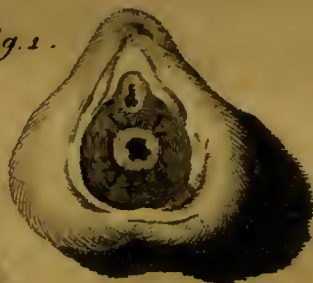


Fig 2 .



Fig 3

1. The Embryo.
2. The umbilical string.
- 3, 3, 3, 3. The membranes, opened in four parts.

FIGURE 2.

A Fetus from two to three months, in part in its membranes, with its umbilical string. It is in the most ordinary situation which it holds in the membranes, where it floats in the water.

1. The Fetus.
- 2, 2, 2. The membranes.
3. The umbilical string, which proceeds to attach itself to the placenta.

FIGURE 3.

Another situation which the fetus sometimes takes, when it is in its membranes.

For the details, see Chapter VIII. of this Volume.

PLATE III.

We have shewn in this Plate (copied from

from the Works of Graaf) the private parts of a girl newly born; those of a girl six years old; and the interior structure of the clitoris.

FIGURE 1.

It represents the private part of a child newly born, which is more visible in the following figure.

FIGURE 2.

The private part of a girl aged six years.

1. Orifice of the vagina.
- 2, 2, 2. Rugosities of the membrane.
3. Urinary Meatus.
- 4, 4. The great lips.
5. The clitoris with its nymphæ.

FIGURE 3.

The clitoris, in which we have made some incisions, that its spongy substance might be perceived.

FIGURE

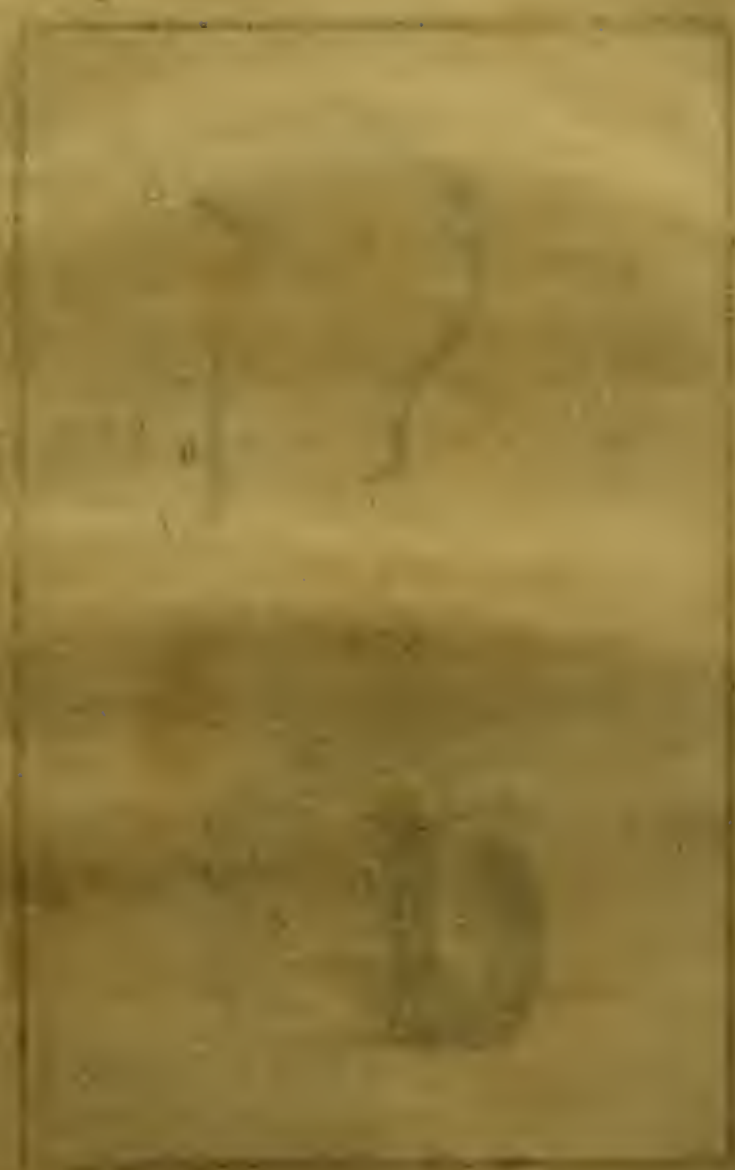


Fig. 2.

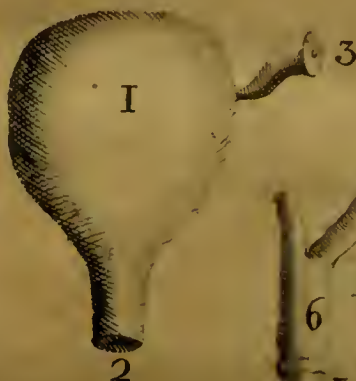


Fig. 3.

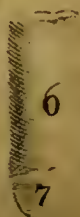


Fig. 4.

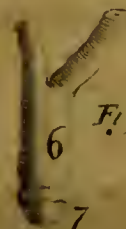


Fig. 1.



FIGURE 4.

1. The clitoris.
2. Its gland, with the nymphæ reversed.
- 3, 3. Incision by means of which the cellular and spongius substance of that part is shewn.

For the two first figures, consult Chapter III. and particularly Chapter V. of the second Volume, which treats on Virginité. See, for figures 3 & 4, Chapters III. and IV. of the same Volume.

PLATE IV.

The parts represented in this Plate are, 1. the exterior parts which distinguish the Man; 2. the matrice with one of its trumpets; 3. the clitoris diversly exposed.

FIGURE I.

1. The distinctive part of the Man.
2. The prepuce.
3. The gland.
- 4 4. The scrotum enveloping the testicles.

5. Line

5. Line called the Rapha, and which terminates at the anus.

FIGURE 2.

1. The body of the matrice.
2. Its neck, or external orifice.
3. One of the trumpets of Fallopius cut, in order to shew its cavity.

FIGURE 3.

6. The clitoris with its prepuce.
7. Its gland, with the plait that forms the prepuce.

FIGURE 4.

It offers the same particulars as the preceding figure, and, moreover, the joints of the clitoris divided.

See, for figure 1, Chapter II. of the second Volume ; and, for the three others, Chapters III. and IV.

PLATE V.

This Plate shews the interior structure of the Penis, with the Bladder, interiorly viewed.





- 1 1. Origin of the cavernous bodies, which, united, form the spongius part of the penis.
2. The Urethra.
- 3 2. Its spongius part.
4. The gland of the penis, or its extremity.
- 5 5 5 5. Great number of vessels and nerves which are distributed at that part.
- 6 6 6 6. Ibid.
7. The anterior part of the bladder.
- 8 8. The prostatae, or glandulous bodies.
9. The orifice of the gland.
10. The bottom of the bladder.
- o o o o. The skin which covers the penis, and that forms the prepuce.

For the description and the use of these parts, see Chapter II. of the second Volume.

PLATE VI.

In this Plate we shew the ramifications of the spermatic vessels, the track which they pursue for administering to the testicles, and that which the feminal liquor is obliged to take for flowing into its reservoirs.

- 1 1. The testicles stripped of the scrotum.
- 2 2. The muscles named Erectors.
- 3 3. Divisions of the spermatic arteries and veins, detached from the large vessels, for supplying the testicles.
- 4 4. Their reunion, for communicating with the testicles by means of a membrane that envelopes them.
- 5 5. Artery and veins of the *pudenda*.
- 6 6. The spermatic branch before it reaches the testicle.
- 7 7. The deferent canals, which conduct the seminal liquor of the testicles to the seminal vesicles.
8. The bladder, with the vessels which are there distributed.

For the particulars, see Chapter II. of the second Volume.

PLATE VII.

This Plate represents a portion of the deferent vessel with the body of the testicle, for giving an idea of the tracks which the seminal humour is obliged to pursue in order to acquire all its perfection.

1. The









1. The body of the testicle, on which we see the ramifications of the *vasa preparantia*.
2. The great lobe of the *epididymis*.
3. Serpentine border of the deferent vessel.
- 4 5. Ibid.
6. The deferent vessel divided, for shewing its cavity.

In Chapter II. of the second Volume, the functions of the deferent conduit are described, and the manner in which the seed is there perfected.

PLATE VIII.

This Plate represents the testicle of an animal prepared in such a manner, that we can there discover the tunics which envelope it and the spermatic vessels.

- 1 1. The *tunica vaginalis* detached from the testicle.
2. The great lobe of the *epididymis*.
3. The winding contours of the deferent canal.
4. The canal divided at its extremity.
5. The body of the testicle swelled by the seminal humour.

6 6 6. The spermatic vessels pursuing the track which they have to make for emptying themselves into the testicle.

For the explication, see Chapter II. of the second Volume.

PLATE IX.

This figure likewise presents the testicle of a dog, deprived of its tunics, and where the *epididymides* are more visible than in the preceding Plate.

1. The great lobe of the *epididymis*.
2. The small lobe of the *epididymis*.
3. The deferent vessel, issuing from the *epididymis*.
4. The same vessel tied to the fold of the groin of the animal in the moment of coition, in order that the swelling of it might be rendered the more perceptible.
5. The testicle swelled by the feminal humour, with the ramifications which are there distributed.
- 6 6 6. The spermatic vessels which conduct the blood to the testicle.

For the description and the use of these parts,













parts, see the Chapter to which we have referred in the preceding Plate.

PLATE X.

We have placed in this Plate the bladder, the feminal vesicles and the *prostatæ*, viewed posteriorly, in order to give an idea of the manner in which the feminal liquor escapes after having quitted the testicles.

- 1 1. The feminal vesicles swelled by the humour which they inclose.
- 2 2. The deferent conduits, which transmit that humour from the *epididymides* to the vesicles.
3. The glandulous bodies, or *prostatæ*.
4. The bottom of the bladder.
5. The canal of the urethra, which serves as a conduit to the urine and to the feminal liquor, for transmitting it outwardly.

For the mechanism of these parts, see Chapter II. of the second Volume.

PLATE XI.

This Plate represents the exterior parts which, in woman, concur to generation.

Z 3

1. The

1. The penil.
2. The mount of Venus.
- 3 3. The great lips.
4. The fork.
5. The *perenæum*.
- 6 6. The *nymphæ*.
7. The *clitoris*.
8. The urinary *meatus*.
9. The conduit of pudicity.
- o o o o. The *glandulæ myrtiformes*.

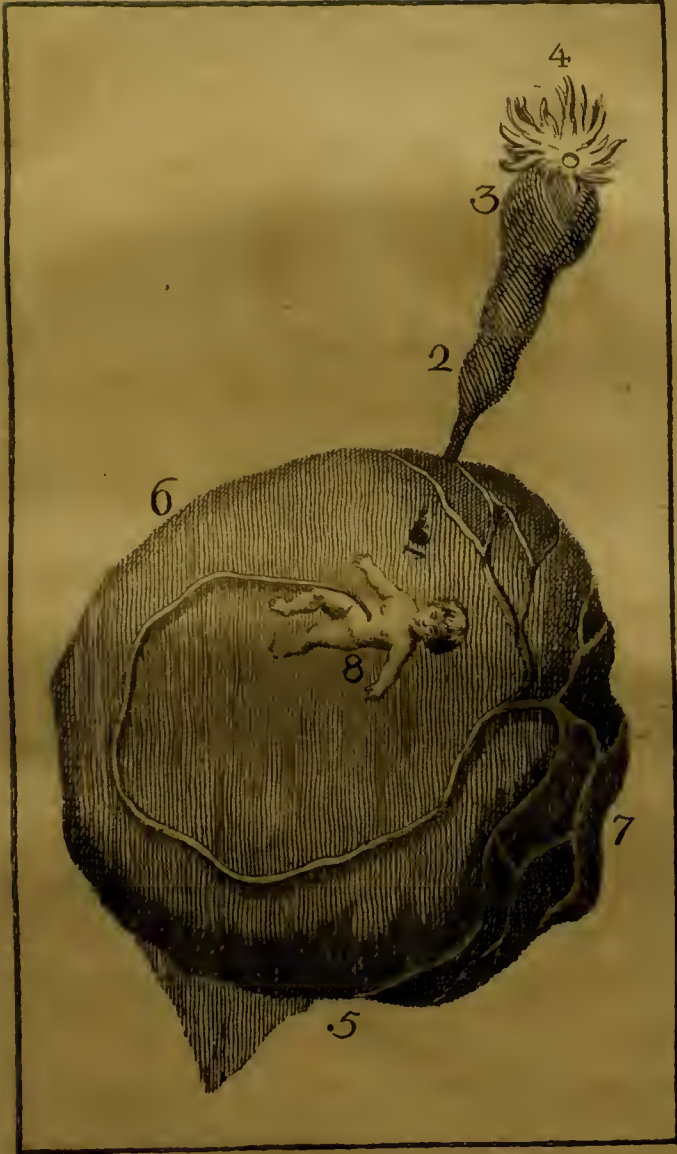
The explication will be found in Chapter III. of the second Volume.

PLATE XII.

This Plate represents the fetus encompassed by its membranes, prepared in such a manner as to leave perceptible that which they contain. We likewise suppose the matrice open, and the trumpet of Fallopius swelled by the preparation.

1. The extremity of the trumpet of Fallopius, which penetrates into the matrice.

2 & 3.





3. The placenta fastened to the bottom of the matrice, and where it loses the umbilical string.
4. The commencement of the string at the navel.
6. The borders or coats of the matrice.

FIGURE 2.

2. The orifice of the matrice.
4. The placenta.
5. The infant in an opposite attitude to the one preceding.
6. The edges of the matrice, in order to shew its thickness.

See Chapter VIII. of this Volume.

PLATE XIV.

In this figure we have represented three infants having one common placenta. They are so disposed, that we can observe in one of them the manner in which the string terminates at the navel.

1. The placenta.
- 2 2 2. Opening of the umbilical threads in the placenta,









centa, and the manner in which they are there distributed.

- 3, 3, 3. The umbilical string, in quitting the placenta.
- 4 4. Its insertion at the navel.
- 5, 7, 7. The teguments of the lower-belly opened for shewing the manner in which the umbilical vessels penetrate into its capacity.
- 6 6. Interior structure of the string.
- 8 8 8. Its exterior structure.

See also Chapter VIII. of this Volume.

PLATE XV.

This Plate represents different defects of conformation, which have given cause to a belief that there have been some persons in whom the two sexes were united; that is to say, Hermaphrodites.

FIGURE I.

It represents the first species of Hermaphrodites, or such as were so considered by the Ancients. It is strictly a man who has no deficiency

deficiency of the natural parts peculiar to his sex; we solely observe a defect of conformation, which shews a chink without depth, situated between the testicles and the anus.

FIGURE 2.

In this species, the natural parts of the man are the same as in the preceding figure. We alone observe, that the testicles, widened on each side, also enable us to see a chink or hollow of the scrotum at the part of the line called *rapha*.

Nothing can prove more clearly the desire which the Ancients had to discover singularities in things the most simple, than the errors into which they were precipitated, by regarding as Hermaphrodites such persons who were conformed as in the two preceding figures.

FIGURE 3.

We see, in this figure, the exterior conformation of some individuals who, from women, have been metamorphosed into men.

It

It is easy to perceive, by what has been said on this subject, that there is nothing contrary to the laws of Nature in these changes, when divested of the miracles by which they are generally accompanied.

See Chapter IV. of the second Volume, for other particulars relating to Hermaphrodites.

FIGURE 4.

This figure represents the private parts of those women who were known in Greece under the name of *Tribades*, and in whom they persisted to take the excessively long *clitoris* for the distinctive part of the man.

See Chapters III. and IV. of the second Volume.

FIGURE 5.

We must place this species of conformation with the preceding. It differs from it no otherwise than in that which the *clitoris*, by its bigness, may oppose to the approaches of the man,

man, and thus render copulation nearly impossible. It was in this case that the Ancients considered the two sexes as united in an individual, without being able to derive advantage from either.

See the same Chapters to which we have referred in the preceding figure.

ALPHABETICAL.

ALPHABETICAL TABLE

OF

THE MATTERS

CONTAINED

IN THIS WORK



A.

ABELONIANS, (*heretics*); their absurdities concerning Marriage, Vol. I. page 73.

ABLANCOURT, (*d'*), his translation of Lucian cited, i. 202.

ABSTINENCE; that of the conjugal act is necessary, during some time, for fertilising pleasures, i. 273.

ACIDS, recommended as capable of repressing the violence of cantharides, i. 149.

ACTS OF UPSAL, cited, i. 124.

AETIUS;

AETIUS; what he says of the virtues of mint, i. 94; his advice, in order to extinguish the fire of love, 99; has treated on the consequences of debauchery, ii. 13.

AFFION; what it is, and the view with which the Chinese make use of it, i. 190.

AGNUS CASTUS, employed in the Convents, and why, i. 77; owes its reputation to the use which the Ancients made of it, 82; absurdities of Arnauld de Villeneuve, 83. and that which M. Chomel says of it, 84.

AGRICOLA; what he says of the hart's teeth, i. 152.

AGYNIANS, (*heretics*); their ideas of marriage, i. 73.

AIR; its necessity for the support of our existence, i. 41, &c. Mercurial's advice to men of an amorous complexion, 99. Moschion's opinion on the subject, *ibid.* Observations of Hippocrates on its influences, with relation to fecundity, 330, &c. Its effects on the body, ii. 129, &c.

ALBERT the Great, cited on borax, i. 140.

ALCHYMISTS, their empiricism with respect to the potable gold, i. 195.

ALCMÆON; his opinion on the seminal liquor; ii. 217.

ALGAROTTI, (le Comte); cited on the customs of the Russians, i. 321.

ALLIBAMONS; they offer their young women to the Europeans, i. 454.

ALPIN,

ALPIN, (Prosper); cited on the virtues of coffee, i. 294.

ALVARES, (Father), cited with respect to the customs of the Abyssinians, ii. 85.

AMASIS; his impuissance, i. 213.

AMATIS LUSITANUS, cited on saffron, i. 165.

AMBERGRIS; observations on its virtues in love, i.

188. How far we may place dependance on it,

189. In what quantity it may be given, 310.

The dose fixed by Lemerî, 311; by M. Macquer, &c. 313.

AMERICANS, have no intercourse with women, from the moment they are supposed to be pregnant, i. 303.

—————; the means which they employ for augmenting the size of the man's distinctive part, i. 306.

AMERICA VESPUTIUS, cited, i. 305.

AMPUTATION *of the testicles*, observations on that subject, ii. 154.

ANALOGY, observed by Hippocrates between men and the country which they inhabit, i. 350.

ANCIENTS; the many fables circulated by them, on the means of extinguishing and re-animating the fire of Love, i. 94. Absurdities and contradictions which we find in their writings, and even in those of some modern authors, 98, &c. That which

which they have said of the qualities of the hart, 151. Some customs of the Ancients, with relation to decency, 265.

ANCILLON, (David); his Treatise on Eunuchs cited, i. 73, 74. Singular anecdote, extracted from the same Work, ii. 79. His observations on the conduct of Origin, ii. 154.

ANDERSON; his History of Greenland cited, i. 393, 435.

ANDRI; cited on the virtues of coffee, i. 294.

ANDROPHILUS; of the plant which he sent to Antiochus, i. 128.

ANECDOTES OF MEDICINE, cited, i. 63, 104, 193, 255.—ii. 6, 35, 208, 254, 280.

ANIMALCULES of the Seed; see SEMINAL LIQUOR.

ANODYNES; bad effects which they may produce, when abused, i. 81.

ANTI-APHRODISIACS; what has been understood by these substances, i. 77, &c. Fables circulated by the ancients, with regard to this subject, 94. Their contradictions, *ibid.* Opinion of Physicians of the present time on anti-aphrodisiacs, 114. See LOVE, AGNUS-CASTUS, COFFEE, CAMPHOR, &c. &c.

APHRODISIACS; what they are, i. 117. No reliance to be placed on their effects, 118, &c. Their operation, ii. 26. For the consequences which have followed the use of these remedies, see LOVE;

LOVE; AMBER; ARACH; OSTRICH; BETEL;
BORAX; QUAILS; CANTHARIDES; the HART;
SKIRRET-ROOT; CYNOSORCHIS; CASTIGATION,
&c. &c.

APIS, an Egyptian idol; indecent homage rendered
him by the women of Egypt, ii. 84.

APOTHECARIES; in France, forbidden to sell cantha-
rides generally, i. 144.

ARABIANS; they have introduced camphor in me-
dicine, i. 91. Use which they make of the
land-crocodile, 124. Their marriages, 448.

ARACH; the views with which several nations em-
ploy it, i. 186, 187.

ARETEUS, was the first who applied cantharides to the
head, as a vesicatory, i. 147. His description
of the mischiefs produced by venereal excesses,
ii. 12. What this ancient physician says of Ma-
niacs, ii. 149.

ARGENS, (*le Marquis d'*); cited on Ocellus Lucanus,
i. 55.

ARISTOTLE; what he says of mint, i. 93. And of the
generative virtue of salt, 107. Cited on borax,
140. His opinion of the feminal liquor, ii. 216.
His system on generation, ii. 298.

ARNAULD DE VILLENEUVE, cited on mint, i. 93.
His reveries on the agnus-castus, 83. Recom-
mends persons who would live chaste, to cau-
terise themselves, 100. To walk on their na-

ked feet; to castigate themselves violently; to take emetics, &c. &c. *ibid.*

ARRACAN; the men of that kingdom hire strangers to deflower their young brides, i. 459.

ARRET, issued by a Queen of Arragon, in consequence of a singular complaint made by a married woman against her husband, ii. 34.

ASIA; what Hippocrates says of its productions, i. 339.

ASTRUC, (M.) cited on the pretended discoveries of Dalempazius, ii. 224. Exposition of his system on generation, ii. 307. He rested on the observations of Harvey and Crarden, 310, 311. Objections which may be made to this system, 311, 312, &c.

ATTITUDES; those invented by debauchery, in the union of the sexes, capable of opposing generation, i. 296. Inconveniences which may further result from thence, 297. Venette cited on this subject, 298. Observation, extracted from Tissot's Onanism, *ibid.*

AUBIGNE, (d'); cited on the membrane of the hymen, ii. 51.

AUGUSTUS; the manner in which he encouraged marriage, i. 395.

AUGUSTINE, (St.); what he says of pleasures, i. 64. Cited on the Abelonians, 74. Tormented during sleep by voluptuous ideas, 77. His account

count of a singular ceremony which had place during the processions of the Greeks, ii. 49. Speaks of a girl who was changed into a man, ii. 163.

AURELIANUS, (COELIUS), named those women *Tri-bades* who abuse their *clitoris*, ii. 93.

AVICENNA, cited on the virtues of mint, i. 94. His advice for subduing love, 99. Cited on borax, 140. His system on generation, ii. 299.

B.

BACON, (*Lord Chancellor*); his enthusiasm for nitre, i. 102. Accused of magic by the women, 104. What he advances with regard to saffron, 162. And women, 412.

BAGLIVI; cited on the use of coffee, i. 294.

BAILLET; his history of children who became celebrated, ii. 139.

BALLEXSERD, (*M.*); his proofs of the degeneration of the human species, i. xvii. &c. Cited on the use of baths, i. 318.

BALZAC; what he said of women who have a melancholic temperament, i. 43.

BATHS; they are salutary to the Turks, i. 175. Utility of cold-baths to fortify the body, 221. Strength which the Romans derived from them;

222. The price which that people paid for the liberty of bathing, *ibid.* Recommended against sterility, 313. Use which the female Turks make of them, 314. Inconveniences which result from the abuse of bathing in Turkey, *ibid.* Good effects produced by their use, 315. Warm baths are frequently dangerous, 318. Baths in use among the Russians, 316. Vigour which it procures the common people of that country, 319. It there destroys the health of persons of high rank, 321, &c.

BARON, (M.); cited on preparations of lead for internal use, i. 116. On borax, 141. On the action of opium, 174. On the potable gold of Madam Grimaldi, 195.

BARRE, (*M. de la*); observation of this physician on the influence which the temperament of parents may have on children, i. 47.

BARTHOLINUS; cited on camphor, i. 90. Remedies which he prescribes against the effect of cantharides, 149. Observations on the consequences of venereal excess, ii. 18. On the clitoris of a courtesan, ii. 92. His opinion on the hymen, ii. 182. 186.

BAUHINIUS; cited on the signs of virginity, ii. 182.

BAUX, (M.); observation of this Physician on a girl who was destitute of the marks of her sex, ii. 108.

BAYLE; cited on the adventure of Combabus, i.

74. Has observed the effects of marriage on the voice, ii. 29.

BEAU, (*M. le*); cited on a man who had twenty-one wives successively, i. 229.

BEAUSOBRE, (*M.*); what he says of population in England, Holland, and Prussia, i. 400.

BEAUTY; it formerly raised women to the rank of Queens, &c. in France and Russia, i. 427.

BEHR, (*M.*); observation, communicated by this Physician, on the astonishing vigour of an old man, ii. 35.

BELET, (*Jean*); a singular custom related by this author, i. 411.

BELHING, (*M.*); cited on generation, ii. 301.

BELLADONA; this dangerous plant ought not to be internally employed, i. 81.

BELLONIUS; cited on opium, i. 159.

BETEL; the views in which it is employed by some people, i. 186. Consequences which result from its use among the Siamese, 187.

BIBLIOTHEQUE DE MEDECINE; observations extracted from this collection: on a singular conformation, ii. 62. On an imperforated woman, ii. 98. On children who are pubescent at an early age, ii. 135.

BIENVILLE, (*M. de*); his treatise on the *furor uterinus*, cited, i. xxii. Observations extracted from this Work, i. 68, &c.— ii. 6.

BILIOUS; *see* TEMPERAMENT.

BLEEDING; recommended by the ancients, for combating the amorous desires, i. 99. Salutory in one kind of impuissance, 217. Corpulent women ought to use it sparingly, 309. Consequences which followed bleeding in a man who, immediately afterwards, would embrace his wife, ii. 19.

BOECLER; cited on the effects of coffee, i. 294.

BOERHAAVE; under what circumstances he recommends the root of skirret, i. 126. His prescription against the action of cantharides, 148. What he says of saffron, 163. The circumstances in which he recommends Spa-water and milk, 225. Cited on the consumption which follows debauchery, ii. 13, 18. On the hydrophobic virus, ii. 25. Is of Galen's opinion, as to the cause of the menstrual flux, ii. 258. His system on generation, ii. 310.

BOYLE; his observation of a singular effect which coffee operated, i. 293. His opinion of nitre, 102.

BOILEAU; his verse on the Congress, i. 247.

BOULEAU, (l'Abbé); his history of the Flagellants cited, i. 202.

BOMARE, (M. de); what he says of amber, i. 312.

BONNET, (M.); his ideas of the passions, i. 60. Cited on microscopic observations, ii. 249. His modesty,

modesty, ii. 289. His objections to M. de Buffon's system on generation, ii. 329. His own exposition, in which he admits the pre-existent germs, ii. 331.

BONO; cited on the seminal liquor, ii. 226.

BONTIUS; has written eulogies on saffron, i. 163.

BORAX; Venette's opinion of it, i. 137. There is no certainty as to its origin, 138. What Mercurial says of it, *ibid.* The Dutch do not solely possess the secret of purifying it, 139. Authors who have spoken of it, and their contradictions, 140. Conjectures of the Author, on the reputation which the borax has enjoyed, *ibid.* What ought to be thought of its virtues for exciting to Love, 142.

BORRICHIVS; singular anecdote related by him, of the smell which a monkey possessed, ii. 211.

BOSSU, (M.); his account of the Savages of Louisiana, with regard to marriage, i. 454, 455.

BOTANISTS; the number of species of satyrion which they distinguish, i. 127. Those recommended by them as stimulants to love, 129. They do not agree on the aphrodisiac plants, 133.

BOUDOT, (M.); imagines that the hydrophobic virus operates only to the injury of the nerves, ii. 25.

BOUGAINVILLE, (M.); his account of the women of certain Savages whom he saw in his voyage

round the world, i. 465. His description of the island of Otaheite, 471, &c.

BOURDELIN, (M.); approves of the use of coffee, i. 294.

BRAMINS; their irruption into the kingdom of Siam, i. 382, &c.

BUCKARIANS; their marriages, i. 436.

BUFFON, (M. de); what he says of the lion's flesh, i. 151. Refutes some pretended virtues of the ostrich and quail, for exciting men to love, 156. His observations on the Congress, 258. Cited on a custom established at Madagascar, 459. On the privilege of women in the kingdom of Congo, 469. On the signs of puberty, ii. 116. On circumcision, 172. On the Nymphotomia practised in some climates, 90. On a defect of conformation in the Hottentot women, 106. The impossibility of being able to depend on any particular signs of virginity, 178, 179, &c. Denies the existence of the hymen, 186. His ideas on infinity, 233. His calculations on the multiplication of plants and animals, 234. His system on generation, 245, 315, &c. Liable to objections, 246, &c. Those of Haller, 318. &c. Those of M. Bonnet, 329, &c. The beauty of M. Buffon's system, 332, 333. Wrongfully accused of having borrowed his system from the ancients, 333.

C.

CALICUT; the King of this country causes his bride to be deflowered before he admits her to the nuptial-bed, i. 460. Privilege enjoyed by the wives of the nobles, 469.

CAMPHOR; what it is, i. 90. Its virtues spoken of by the Ancients, *ibid.* The credit which ought to be given to its effects, for extinguishing excitements to love, 91. Physicians who have employed it, *ibid.* &c. Has been used with success as a remedy for the plague, 93. Is prejudicial for literary men, and women of delicate constitutions, *ibid.* A specific for the action of cantharides, 150.

CAMUS, (M. le); cited on the hydrophobic virus, ii. 24. His opinion on the feminal liquor, 217. His system on generation, 313.

CANTHARIDES; are by no means aphrodisiacs, i. 143. They attack the bladder; *ibid.* Venette's observations on them, *ibid.* Misfortunes which their use has caused to several persons, *ibid.* &c. Observations-extracted from Ambrose Paré, 145. From the German Ephemerides, *ibid.* From Wedelius, *ibid.* From the Medical Dictionary, 146. Observations of M. de Sauvages on the action of cantharides, 148. Methods recommended by the most celebrated Physicians, for remedying the accidents which they occasion, 149, &c.

CAP.

CAPPIVACCIUS; observation of this author on the good effects of milk, i. 226. Cited on the hymen, ii. 183.

CARDAN; his credulity as to the virtues of the hart's tears, i. 152.

CASSERIUS; cited on the hymen, ii. 182.

CASTIGATION; recommended by Arnauld de Vileneuve and Gordon to those of an amorous complexion, in order to calm their passions, i. 99, 100. Employed by Tamerlane, for exciting himself to debauchery, 201. And the philosopher Peregrinus, *ibid.* Prohibited by religion in these cases, 202. The circumstances in which it may be adopted, *ibid.* Observations on the effects produced by castigation, 202, 203. The history of the Flagellants, &c. by the Abbé Boileau, cited, 202.

CASTRATION; see MUTILATION.

CATULLUS; verse of this poet cited, ii. 208.

CAVERNOUS BODIES; their description, ii. 52, 53.

CELIBACY; reflections on the man who leads a life of celibacy, i. 54. Not adapted for those of plethoric, bilious, and melancholic temperaments, 55. Rather congenial to phlegmatic men, 52, 288. Accidents to which some persons are exposed, who live in a state of celibacy, 63, 65, 66, 67, &c. Reasons why it is not suitable to Magistrates, 413. And to literary men, 414, 416. The Persians regard celibacy as an unnatural

tural state, 441. Held in difesteem also by the people under the dominion of the Emperor of Morocco, 446. And by the Chinese, 462. Celibacy held in difesteem by the Illinois Savages, 457, &c. See TEMPERAMENT.

CELSUS; has reated of the diseases produced by debauchery, ii. 13. His description of the method adopted by the ancients, for preceeding to infibulation, 173.

CÉSAR; the manner in which he encouraged marriages, i. 394.

CHA-GEHAN, (the Emperor); his fate, after endeavouring to realife voluptuousness in old age, i. 120.

CHAMBRE, (M. de la); cited on nitre, i. 102.

CHAMPIGNON, VENOMOUS; see MUCHO-MORE.

CHAPPE, (M. le Abbé); what he says of castigations, i. 203. Cited on the Russian baths, 316. On their marriages, 467. His observations on the debauchery of young persons in Russia, ii. 131. And on the ceremonies which are observed there for being assured of the virginity of a newly-married woman, 194.

CHARAS, (M); cited on opium, i. 173.

CHARLEVOIX; his remarks on the inhabitants of Paraguay, i. 381. Of Serpents which pursue young women in that country, for the purpose of violating them, 451.

CHARM

CHARM FOR TYING THE COD-PIECE; it is an imposture, i. 237. Why these *charms* are more common in country places than elsewhere, 238.

CHESNAU; observation of this physician on the excess of a new-married couple, i. 18.

CHEYNE; his enthusiasm for milk, i. 226, &c. Is against the use of coffee, 294.

CHILDREN, ILLEGITIMATE; the idea which is conceived of them in Society, i. 387. Some children in whom the physical faculties have been very precocious, ii. 133. Curious observations on this subject, *ibid.* 134, &c.

CHINGULANS; their marriages, i. 468.

CHINESE; the views in which they employ opium, i. 82. The use which these people make of salep, 130. Sentiment of the Author on the effects which opium produces on the Chinese of Batavia, 190, 191. Their marriage ceremonies, 461. They contract marriages for their children, while in the womb of their mothers, 463. And marry dead persons, *ibid.*

CHIRIGANS; the reason why they inter their children in the public roads, i. 454.

CHOCOLATE; recommended against sterility, i. 289. Its effects, *ibid.* Observation extracted from Lemeris, 290.

CHOMEL, (M.); Rector of St. Vincent de Lion; his credulity respecting the virtue attributed to *agnus-castus*, i. 84.

CHOMEL,

CHOMEL, (M.); King's physician; his refutation of the Rector of Lyons, on *agnus-castus*, i. 84, 85. Denies the aphrodisiac virtue ascribed to orchis, 132. His opinion of the electuary of fatyrion, *ibid*.

CHRISTIANS OF ST. JOHN; see SABIANs.

CHRYSOCOLLA; see BORAX.

CHYMISTRY; does not furnish aids for extinguishing the temperament, i. 71. Nor for restoring strength, when it has been enfeebled by debauchery, 194, 195.

CIRCISSIANs; their beauty, i. 443. Their wicked and cruel nature, 444. Their marriages, 445.

CIRCUMCISION; the necessity of it in certain climates, ii. 171, &c. Explanation of the circumcision of girls, *ibid*. On the circumcision of the Jews, the Turks, the Persians, &c. 172.

CIRCULATION; diminished by the power of narcotics, i. 80.

CLEOPATRA; her impudicity, ii. 43.

CLERC, (M.); his observations on bilious temperaments, i. 36. On melancholic temperaments, 45. On phlegmatic temperaments, with relation to love, 52. On the constitution of the Russians, 78. Cited on the choice of spouses, 277. On baths, 316. On those of Russia, 319. On chymical operations, 197.

CLIMATE; what Hippocrates says of it, with relation to

to the vigour of men, i. 330, &c. It accelerates or retards puberty, 149.

CLITORIS; its composition, ii. 91. Is the seat of voluptuousness in women, *ibid.* Abuse to which they have converted it; and the observations made, in consequence, by M. Tissot, Plato, Bartholinus, Tulpius, Juvenal, Lucian, Cœlius Aurelianus, and Venette, 92, 93. This part may be amputated, 93. It is even an act of religion among certain people, *ibid.* Error into which the Ancients fell, with respect to its excessive largeness, 94.

CLOTAIRE; took for wives two sisters at one time, i. 427.

COCKBURN; observation of this physician on a singular case of impuissance i. 216, 217.

COD-PIECE; means of tying it, is an imposture, 237. Pretenders of this description are more common in the country than in other places, 238.

COELIUS RHODIGINUS; cited on the effects which castigations produce, i. 202.

COFFEE; bad effects which some Physicians pretend it may produce, i. 291. Anecdote relating to it, published by M. Hecquet, 292. Another by Stenzel, 293. Its good effects, 294. Recommended to literary men, *ibid.* Use which is made of it by the Turks, *ibid.* Case in which persons ought to be very circumspect in using it, 295.

Cor.

COL DE VILLARS, (M.); cited on the priapism of hydrophobic patients, ii. 25.

COLLECTION ACADEMIQUE; cited on a disease known in Poland under the name of *plica*, ii. 88. On an anecdote, acknowledged to be void of truth, 134. On the eruption of the menstrual flux, 135. On the puberty of a child, *ibid.* On a Monk, who could distinguish virgins by his sense of smell, 210. On animalcules of the seed, 223, &c. On the famous Englishman, Thomas Parr, 253.

COLUMBUS; cited on the hymen, ii. 183.

COMBABUS, made himself an eunuch, i. 74. Comforted by his friends, who followed his example, *ibid.*

CONGO; customs which are there observed in the ceremonies of marriage, i. 469.

CONGRESS; what it was, i. 247. In what case it was commanded, 249. Conjectures on its origin, 250. Observations of Paré and Venette on this institution, *ibid.* Narrative of the circumstance relating to the Marquis of Langey, 251, &c. &c. The time in which the Congress was abolished, 262. Motives that led to its abolition, *ibid.* Anne Robert, cited on this subject, 257. Justinian cited, 256. Montesquieu, *ibid.* Tagerreau, Peleus, and Hotman, 257. Buffon, 258.

CONSUMPTION; that which is produced by the abuse of pleasures, ii. 11. The observations of Hippocrates

crates on it, *ibid.* and 13. Actius, Lommius, Galen, M. Tissot, &c. *ibid.* &c.

CONSTITUTION; see TEMPERAMENT.

CONVENTS; the methods practised in those edifices for restraining the desires, i. 59. *Agnus-castus* inutilely employed for that purpose, 82, 83. The methods which ought to be pursued in Convents, 59. An observation made by the Author in a Convent, with relation to the first appearance of the menstrual discharge in a young woman, ii. 387.

COSTE, (M); what he says of men who are attacked with the gout, and who resign themselves to the pleasures of love, ii. 21, 22.

CORPULENCE; opposes fecundity when it is excessive, i. 295, 308. Advice relating to this subject, 309.

COUNCIL; that of Nice, excluded eunuchs from the sacerdotal office, i. 72. That of Rheims, excommunicated the married ecclesiastics, i. 410.

COUNTRY; the melancholic temperament rarely found there, i. 41.

CROCODILE, (LAND); see SCINC-MARINE.

CRUCIUS; cited on the astonishing vigour of a man, ii. 38.

CYNOSORCHIS; fables which the ancients have written on this plant, i. 96.^d

CYPRIANUS; observation of this Author, which destroys

stroys the system of Hippocrates on generation,
ii. 302.

CYTHEREA, (*the New*); see OTAHEITE.

CZARS; their custom of chusing an Empress among
the most beautiful women of the Empire, i. 427.

D.

DANCING; its salutary effects, when practised by
certain persons, i. 359.

DARTOS; description of this part, and its use, ii. 65.

DECISIONS OF MIDWIVES; those which concern the
virtue of girls are replete with absurdities, ii. 203.

DEFLORATION; the Divinities who presided over it
among the Romans, ii. 211. An abominable
custom practised by these people, 181. Signs
which have been considered as certain of a girl's
defloration, 204, &c. Knowledge which was
attributed to Democritus, of discovering the de-
floration of a girl by looking at her, 210. Ex-
cellence of a Monk's smell, who by that means
discerned the same thing, *ibid.*

DELOBEL; cited on borax, i. 138.

DEMOCRITUS; could distinguish virgins, it has been
said, by observing their eyes, ii. 210.

DESAGUILLIERS, (M.); cited on the effects of air
on the human body, i. 42.

DESESSARTS, (M.); cited on the physical education of children, i. 324.

DICTIONNAIRE DE CHIRURGIE; cited on the operation of the Nymphotomia, ii. 91.

————— DE CHYMIE; cited on the effects of amber, i. 313.

————— DE MEDECINE; cited on the effects of anodynes, i. 81. On cantharides, 146. On saffron, 165. On opium, 179. On coffee, 293. On amber, 312. On insanity, and its causes, ii. 147. On infibulation, 174. On the amputation of the penis, 159. On the existence of the hymen, 188. On the animalcules of the seminal liquor, 225. On the prolongation of the use of physical love, 254.

————— DES ANIMAUX; cited on the use which has been made of lion's flesh, i. 151.

————— DE SANTE; an error which we find in this Work, at the article *Sterility*, i. 310, &c.

————— ENCYCLOPEDIQUE, cited on the heretical *Abstainers*, i. 73. On the singular customs of the Abelonians, 74. On the ablutions in use among the Turks, 315.

RAISONNE D' ANATOMIE ET PHYSIOLOGIE; cited on the double penis, ii. 62. On a girl whose breasts were formed in her second year, 129. On the pretended observations of Dalempazius, 222. On the spermatic animals, 226. On the developments of the fetus, 344.

DIET;

DIET; that which unmarried persons ought to avoid,
i. 110, 113. See REGIMEN.

DIGBY, (*the Baron*); his enthusiasm for nitre, i. 102.

DIONYSIUS; dimensions which he gives to the part that distinguishes the man, ii. 56. His Anatomy cited on the penis, 86. Denies the existence of the hymen, 183, 184. His opinion on the marks of pucelage, 188.

DIOSCORIDES; what he says of the *agnus-castus*, i. 83. Of mint, 94. Of the scinc-marine, 125. Cited on borax, 140. On saffron, 165. See MATTHIOLE.

DISSEMINATION; what it is, ii. 243. Objections which may be made to this hypothesis, 244.

DREAMS; narcotics procure terrific dreams, i. 80. Vary according to the temperament, 184.

DRUIDESSES; the circumstances in which they sacrificed to love, i. 452.

DUFRESNI; cited on the marriage of literary men, i. 414.

DUPLEX, (*Scipion*); cited on the Gauls, i. 272, 328.

DUVAL; his singular treatise on Hermaphrodites, cited on the metamorphoses of women into men, ii. 163. Observations on the signs of pucelage, 193. Cited on the names given to the private parts of women, 95.

DUVERNEY; his opinion on the cause of the menstrual flux, ii. 258.

E.

ECCLESIASTICS; sold to new spouses the liberty of sleeping together, i. 407. Calixtus II. excommunicated those of the clergy who were married, 410. They ought not to have interfered in the decision of causes relating to impuissance, 261. Archbishop Hincmar's opinion on the subject, *ibid.* &c.

EDINBURGH MEDICAL ESSAYS; cited, i. 215.

EDUCATION, physical and moral; M. Tissot's observations thereon, i. 109, &c. &c.

EGGS; may excite certain men to love, i. 142, 155.

EGOTISM; means by which it may be produced, i. 71. 72.

EGYPT; the views with which they there employ opium, i. 82. Cause to which the fecundity of the Egyptian women is attributed, 107. The Egyptians make use of the land-crocodile, 124. Composition employed by them for exciting joy, 219. The distinctive part of the man worshipped by the Egyptian ladies, ii. 49. Singular honour which they also rendered to their god *Apis*, 84. The part by which they thought the spirit of Apollo entered into the body of the Sybils, *ibid.*

ELECTRICITY; sterility has been cured by the employment of this means i. 360. Observation on this subject, *ibid.*

ELEC-

ELECTUARY; that of satyrion noticed by M. Chomel,
i. 132.

EMERYO; its first lineaments in the matrice, ii. 342.

EMPIRICS; the manner in which those who reside
among the Indians, deceive the people with
opium, i. 183. An Empiric killed a man of
distinction with cantharides, 145. Composition
which they administered for potable gold, 195.

ENGLISH; their enthusiasm for nitre, i. 102. The
reasons which induce the Scotch and Irish to
make use of saffron, 162. Physical education
of the English, 324. Whimsicalities of an
English lady, ii. 44.

EPIHEMERISES OF GERMANY; observations which are
extracted from them, i. 145, 164. On a defect
of conformation, ii. 62. On the eruption of
the menses, ii. 262. On their absence, 276.
On generation, 341.

EPICURUS; his opinion on the seminal liquor, ii. 216.

EPIDYDIMIS; what it is, ii. 67, &c. &c.

ERECTION; the manner in which it may be produced
by opium, i. 189. If too great, impuissance
may follow, 215. Observation which proves
it, *ibid.* May be caused by pain and chagrin,
218, &c. Erections of hydrophobical persons,
ii. 25, &c.

ERCTIC ARDOUR; (*disease, fury;*) what it is, 63.
&c. 68, &c.

EROTIC DISEASES; those which may attack persons who live in a state of celibacy, i. 63, 64, &c. Those which follow amorous excesses, ii. 11. See **SEMINAL LIQUOR**. Those which commonly attack youth at the age of Puberty. See **PUBERTY**.

ETMULLER; his account of the properties of the hart, i. 155.

EUNUCHS; persons have become so, from a spirit of religion, i. 72. Excluded the sacerdotal office by the Council of Nice, *ibid*. Fanatics who made eunuchs of all those who fell into their hands, *ibid*, &c. Men have made themselves eunuchs, in order to avoid the leprosy and the gout, 75. The cause to which they owe that trifling sensation of pleasure experienced by them, ii. 219. See **COMBATUS**; and also **MUTILATION**.

EUROPEANS; that which Hippocrates has said of their constitution, i. 348.

EXCISION; what it is, ii. 172.

EXERCISE; its good effects, i. 111, 112. Salutary for persons of a melancholic temperament, 221.

EXOTICS; see **PLANTS**.

EXPOSITION; that which Hippocrates says of the exposition of cities, relatively to population, i. 328, &c. &c.

F.

FALLOPIUS ; cited on the internal use of borax, i. 138. This author admits the hymen, ii. 182. Description of the trumpets which he discovered, 103, &c.

FECUNDITY ; the cause to which it is attributed in Egypt, i. 107. The temperaments that are the most proper thereto, 276, &c. Singular examples of fecundity, 378, 379.

FEMALES ; the reason why those of the brutes do not experience the periodical flux, ii. 286.

FERNEL ; was called to the court of Henry II. and blessed his marriage with fecundity, i. 271. Re-compence which he received from the Queen, 273.

FERRAND ; prescribed bread and water for those of an amorous complexion, i. 99. Grants that persons of a too ardent temperament should be criminally prosecuted, 101. His treatise on the diseases of love, 99 ; ii. 152.

FERREIN, (M.) ; his lectures on anatomy at the amphitheatre of the King's Garden, cited, ii. 224. That which he observes on the mystery of generation, 335.

FETUS ; its gradations in the matrice, ii. 342, 343. Its state three or four days after fecundation, 342. At the end of fourteen days, *ibid.* And three

B b 4

weeks,

weeks, towards the conclusion of the first month, &c. 343. Observations on the size and weight of children, 344. Membranes which inclose the fetus, *ibid.* and 345.

FICIN, (*Marfile*); recommends inebriation as a means of calming the turbulence of amorous desire, i. 99. The reason which he adduces, *ibid.*

FISHES; their astonishing fecundity, ii. 239, 240.

FLOWERS; see MENSTRUAL FLUX.

FLUX OF GOLD; see HEMORRHOIDAL FLUX.

FLUX, HEMORRHOIDAL; is a periodical evacuation in many men, ii. 281. Its causes, *ibid.* Observations of Hippocrates and Sthaal on it, 282. Precautions necessary in this case, 281, 283, &c.

FLUX, MENSTRUAL; what it is, ii. 256. The opinions of Physicians divided on its causes, 257. That of Galen adopted by great physiologists, 258. Signs which announce this evacuation, *ibid.* Errors of Naturalists as to the qualities of this blood, 259. Extravagances of Paracelsus, 260. The vessels which furnish this blood, 261. Particular observations, 263. Causes which accelerate or retard the eruption of the menses, *ibid.* Women who are not subject to this discharge, 264. Continuance of this evacuation, 265. Its influence on fecundity, 266. 267. Advantages of women who reside in the country on those who live in cities, 268. Irregularity of the menses, 269. General prejudices, 273. Observations on

on the effects which terror may produce in young persons, on the first appearance of the menses, 287. Opinions of Aristotle and Avicenna on the menstrual blood, 299.

FONTENELLE, (M. DE) ; cited on the systems of generation, ii. 297.

FORESTUS ; his prescription against the effects of cantharides, i. 149.

FORMOSA ; the women there have the superiority of the men, i. 468.

FRANCE ; tyranny which the Lords of that country exercised on their vassals and *villains*, i. 404. Differences observed there between the men of the several provinces, 356, 357.

FREIND ; his opinion on the causes of the menstrual flux, ii. 258.

FRENCHMEN ; have the same constitution as the ancient inhabitants of Greece, i. 78. The people who, in America, present them, as well as other Europeans, with young girls, 454, 455. Their reception at Otaheite, 473, &c. &c.

FRIEND of Humanity, cited, i. 39.

FROGS ; virtues attributed to them by Vallisnieri, i. 156.

FUROR UTERINUS ; see EROTIC ARDOUR.

G.

GALEN; has written on the physical inconveniences of celibacy, i. 66. Always trembled when he had occasion to make use of opium, 81. Cited on the land-crocodile, 125. On the effects of milk, 226. Observations of this physician on the retention of the seminal liquor, ii. 4. On the consequences which result from an excess of pleasures, 13, 17. His opinion on the prolific humour, 216. And on the cause of the menstrual flux, 258.

GARDANE, (M.); his opinion on the effects of nenuphar, i. 86. On preparations of lead internally administered, 114. His conjectures on Medical Electricity, cited, 360.

GARENGEOT, (M.); cited on castration, ii. 157.

GAULS; that which Montaign says of them, i. 327. And Dupleix, 328. Singular law relating to vigour among these people, *ibid.* Liberty which their young women enjoyed, in the choice of a spouse, 426. Amorous sacrifice, sanctioned by their religion, 451.

GENERATION; frequently opposed by too much corpulency, i. 295. Opposed also by the attitudes which debauchery has invented, 296. Prevented likewise from having place by the venereal disease, the King's evil, scurvy, &c. 307. The manner in which it was explicated by the ancient philosophers,

phers, ii. 213. Exposition of some systems, 225. Questions to be resolved before any-thing can be comprehended on this operation of Nature, 292, &c. Varieties in the result of the act which concurs to generation, 296. System of Aristotle, 298. Of Avicenna, 299. Of Hippocrates, 300, &c. Of Harvey, 302. Discovery of the eggs, *ibid.* System of animalcules opposed to that of the eggs, 306. Ingenious exposition of this system by M. Astruc, 307, &c. Objections, *ibid.* System of M. Camus, 313. That of M. de Buffon, 315, &c. Combated by M. Haller and M. Bonnet, 318, &c. System of disseminations, 331. Absurdities of the system of fortuitous generations, 335, &c. Anecdote related by Voltaire, and which is well known in England, 336. Points on which Authors are agreed, for generation to have place, 338, &c. For generation, coupling is unnecessary in certain animals, 291. See EMBRYO; FETUS; and SEMINAL LIQUOR.

GEOFROY, (M.); cited on borax, i. 139. On opium, 177. On ambergris, 311.

GEORGIANS; their marriages, i. 445.

GERMANS; they paid the skirret-root to the Emperor Tiberius by way of tribute, i. 127.

GIAGUERS; their sacrifices to love, i. 453.

GIRDLE; made of the branches of *agnus-castus*, i. 83.

GIRLS;

GIRLS; diseases which attack those of an ardent temperament, i. 64, &c. That which occurs, according to some authors, to those who are lascivious, ii. 304. See PUBERTY; LOVE; MENSTUAL FLUX; and VIRGINITY.

GLAND; description of this part, ii. 53.

GLANDULÆ MYRTIFORMES; described, ii. 96.

GLAUBER; cited on borax, i. 102.

GOA; they sacrifice, in this country, the virginity of girls to a brazen idol, i. 459.

GOLD, POTABLE; the manner in which it has been employed in medicine, i. 194. Brought into esteem by empirics, *ibid.* That to which its virtues may be reduced, 195, &c.

GORDON; his advice to unmarried persons, for enabling them to contend against love, i. 99.

GOUT; men subject to this affliction ought not to indulge in the pleasures of love, ii. 19.

GRAAF; disputed with Stenon the discovery of the eggs in women, ii. 304. Cited on the hymen, ii. 183. His exactness in describing the private parts in young women, 190.

GREEKS; reasons which prompted them to consider the lettuce as a preservative against love, i. 89. Their worship of Priapus, ii. 49.

GREENLANDERS; their marriages, i. 434.

GRIMALDI, (*Madam*); the opinion which ought to be

be formed of her tincture of gold for reanimating the powers, i. 194, 195, 196.

GRUNDLING; a German Professor, who accused Hippocrates of Atheism, ii. 148, 149.

GUEBRES; their incestuous marriages, i. 438.

GUINEA; the manner in which marriage is there encouraged, i. 392.

GYNANDRES; that which is to be understood by this word, ii. 162. Observations concerning the metamorphoses of women into men, extracted from Pliny, *ibid.* From Antoine du Pinet, and Lucius Mulianus, *ibid.* From St. Augustine, Duval, Tralian, Fulgoses, 163. And Paré, 164. Opinion which may be formed of such histories, with an explication of these phenomena, 165, 166, &c.

H.

HAGUENOT, (M.); his Memoir cited on the danger of inhumations in churches, i. 42.

HAIR; some nations are destitute of it, ii. 87. Inductions which may be drawn from the quantity of hair, *ibid.* Singular observations, *ibid.* 88.

HALLER, (M.); that which he advances of the observers of Nature, ii. 294. Opposes the system of M. de Buffon on the reproduction of beings, 318. Imagines that the organic particles are animals foreign to the purpose of generation, *ibid.*

Denies

Denies the resemblance of children to their father, *ibid.* &c. His observations, 319, 320, 321. Denies the possibility of the arrangement of the organic particles, 322. And the existence of a feminal liquor in women, 326, &c. Exposition of his system by the eggs, 330, &c.

HALLEY; the influence of love on this great philosopher, i. 416.

HART; its reputation in the *Materia Medica*, i. 151. Credulity of Pliny, as to this subject, 152. Of Cardan, Agricola, and Xenophon, 152, 153. Reasons which induced the Ancients to consider the tail of this animal as an aphrodisiac, 154. Etmuller's observations thereon, 155. To what we must reduce the virtues of the hart's penis, 153, 155.

HARTSOEKER; his observations on the feminal liquor; ii. 221, 226.

HARVEY; his system on generation; ii. 302. Admits the eggs, without explicating any-thing in a satisfactory manner, *ibid.* and 303.

HECQUET; cited on the use of coffee, which, he pretends, opposes fecundity, i. 291.

HEISTER; cited on the signs of virginity, ii. 182, 183, 187. His observations on the feed, 226.

HENISIUS; cured the plague with camphor, i. 93. A triumphal column erected for him at Verona, *ibid.*

HENRY

HENRY II. OF FRANCE; his marriage rendered fecund, through the advice of Dr. Fernel, i. 271.

HERB OF THEOPHRASTUS; the opinion of Botanists on this plant, i. 128.

HERETICS; who mutilated themselves and others, i. 72, 73.

HERMOGENUS; forgot all his rhetorical acquirements at the age of twenty-four years, ii. 139.

HILDANUS; cited on the menstrual flux, ii. 275.

HINEMAR, (*Archbishop*); asserted, that ecclesiastics ought not to interfere in causes of impuissance, ii. 261.

HIPPOCRATES; his book entitled the *diseases of Virgins*, cited, i. 66. His advice to those who desire to have children, 308. His treatise on Air and Water, 328. His observation on the situation of cities, and on the waters which the inhabitants use, 330, &c. &c. Analogy which he draws on the constitution of men, 339. His observations on the Asiatics, *ibid.* On the Sauro-matians, 341. The *Wanderers*, 343, &c. That which he says of the dorsal consumption, ii. 12. Cited on the effects produced by love, 148. Accused of Atheism by a modern Author, and found his defenders, *ibid.* and 149. His ideas of the seminal liquor, 215. His system on generation, 300. Observation which opposes this system, 302.

HOFFMAN;

HOFFMAN; observation given by this physician, i. 65. His opinion of anodynes, 81. And of nitre, 105. Has highly extolled saffron, 163. Has written on the dorsal consumption, ii. 13. Speaks of a lubricous woman attacked by the epilepsy, 17. That which he supposed he saw in the feminal liquor, 222.

HOLLANDERS; they do not exclusively possess the knowledge of purifying borax, i. 139.

HOMBERG, (M.); is the first who laboured on borax, i. 139.

HONTAN, (*Baron*); cited, ii. 117.

HORACE; cited, i. 424.

HOTTENTOTS; obliged to change the general attitude in the union of the sexes, on account of an excrescence peculiar to their women, i. 300. A singular ceremony said to have place at their marriages, 460. Ancient customs relating to the Hottentot widows, *ibid.* and 461. Monstrous excrescence of the women, ii. 106. They no longer practise the extraction of one testicle, 169.

HYGMOR; cited on the hymen, ii. 183.

HYMEN; this membrane is contrary to Nature when it opposes generation, i. 305. Assertions respecting its existence, ii. 182. Authors who admit it, *ibid.* Authors who deny its existence, 183. Instances of women who became pregnant, though imperforate, 191, &c. See VIRGINITY.

HYPNOTICS;

HYPNOTICS; remedies which were thus named by the Greeks, i. 80.

HYSTERIC, (*diseases*); observations of M. Tissot on this subject, i. 64. Of Zacutus Lusitanus, *ibid.* And Hoffman, &c. 65, &c. See **EROTIC ARDOUR**.

I.

ICELAND; particular ordinance which was published there for encouraging the young women to repopulate the Isle, i. 393. Ceremonies of marriage, 435.

ILLINOIS; men who live in a single state are despised by these people, i. 456, 457.

IMAGINATION; is easy to be struck in weak men, i. 87. Observations which prove this assertion, 88, 89, 237, &c. The manner in which an ardent and voluptuous imagination may derange the animal economy, 60. See **UNMARRIED MEN**, and the article **IMPUISSANT**.

IMPERFORATION; what it is, ii. 97. Means by which it may be remedied, *ibid.* Observations relative to this defect of conformation, *ibid.* and 98, 108. Women have nevertheless conceived with this defect, 97, &c.

IMPUISSANCE; division which the Author has made of this disease, i. 205. That which has its source in the imagination, 208. An example on

this subject, 210. That which follows debauchery, 212, &c. Example of Theodoric, king of Burgundy, and Amasis, king of Egypt, 213. A too ardent passion may occasion this state, 214. Observation, *ibid.* Means to be adopted in a similar case, *ibid.* Singular impuissance of a noble Venetian, 215. His cure, 217. Of impuissance caused by pain or chagrin, 218. Advice on this subject, 219, &c. Cold baths recommended in cases of impuissance caused by debauchery, 221. Also Peruvian bark, under certain circumstances, *ibid.* and 225. And mineral waters, 224. Milk, with the opinion of Authors thereon, 225. Observation of Cappivaccio, 227. Another observation, 231. Absolute impuissance incurable, 237. Impuissance of those who believe themselves enchanted, *ibid.* Impuissance common among the Scythians, with the observations of Hippocrates on this subject, 342, &c.

IMPUISSANT; mysterious words cannot render a man impuissant, i. 238. Histories which prove that imagination and dread solely operate in this case, 241, &c. Methods which ought to be pursued in these circumstances, 244. Reason why the Congress was ordered, 247. See **IMPUISSANCE**, and **CONGRESS**.

INDIANS; they make use of camphor, i. 91. Consequence drawn by the Author from thence, *ibid.* Fable related of an Indian, who was said to have derived from orchis the power of consummating the
physical

physical act seventy times in succession, 96, 127.
Their marriages, 446.

INDOLENCE; mischiefs which it may produce, i. 110,
112.

INEBRIATION; the people who employ opium for the
purpose of procuring intoxication, i. 186, &c.
&c.

INFIBULATION; what it is, ii. 173. Method of the
ancients for effecting this operation, according to
Celsus, *ibid.* Use made of it by the Oriental
Monks, 174. It cannot render the men chaste,
ibid. Custom of the Romans, 176. Adopted
by the Roman ladies, in order to secure the fi-
delity of their lovers, *ibid.* Infibulation of
girls, as practised by the Africans, 85.

IRISH; the use which they make of saffron, i. 162.
Singular sensation of an Irishman, 193.

ISLES, PHILIPPINES; the manner in which marriages
are there performed, i. 443.

ITALIANS; they make use of saffron, i. 162.

J.

JACQUES, (M.); published a thesis on claustral vir-
ginity, i. 67.

JAMES, (Dr.); cited on the effects of love, ii. 147.
His opinion on the hymen, 187. Admits its
possible existence in warm climates, 188. See
DICTIONNAIRE DE MEDECINE.

JEROME, (St); his portrait, drawn by M. Thomas, i. 61. His observation on the early puberty of a child, ii. 133.

JEWS; their regulations, with respect to conjugal duty, ii. 40. Affirmed oaths, by laying the hand on their private parts, 50.

JOURNAL ECONOMIQUE; cited on the effects of coffee, i. 295.

————— ENCYCLOPEDIQUE; cited on the effects of opium, i. 161. Observations on the inhabitants of a small village, 335. Cited on a custom observed in the Isle of Limaçons, 378. On a custom in Guinea, 392. In Senegal, *ibid.* On the Chirigans, 454. On the Otaheitans, 472. On a singular excrescence, ii. 61. On imperforation, 192.

————— DE MEDECINE; observations extracted from this Work, i. 150. ii. 36. A girl destitute of the parts usual to her sex, 109. Premature children, 137, 138. On mutilations, 155. On the eruption of the menses, 262. A man who had the periodical flux by the penis, 281.

————— DES SAVANS; cited on the pregnancy of a girl no more than nine years old, ii. 133. On the premature eruption of the menses, 135. On a child who gave singular indications of manhood, 137. On generation, 341.

JOUBERT; cited, ii. 132.

JOULAIN,

JOULAIN, (M.); his calculations relating to the multiplication of men since the Creation, ii. 235, 236.

JULIAN, (*the Emperor*); portrait which he drew of the Parifians, i. 78.

JUSSIEU, (*M. de*); cited on the use of coffee for literary men, i. 294.

JUSTINIAN; his regulation as to impuiffance, i. 256.
M. de Montesquieu's observation on the same subject, *ibid*.

JUVENAL; cited, ii. 84.

K.

KALMUCS; their customs with relation to marriage, i. 438.

KAMTSCHADALES; use which they make of *Mucho-More*, i. 134. Observations on this subject, *ibid*.
Proofs to which they must submit before marriage, 429.

KOLBE, (M.); cited on a custom of the Hottentots, ii. 169.

KORIACKS; qualities which the women of this country esteem in their husbands, i. 432.

KORNMANN, (HENRY); his tract on Virginity, ii. 189, 207.

KRACHENINNIKOW, (M.); cited on the effects of the Russian champignon, i. 134.

L.

LADIES, (Athenian); they made use of agnus-castus, for the purpose of conserving their chastity, i. 82.

LAMBERT, (M. de St.); his poem of the Seasons cited, i. 366, 389.

LAMOIGNON, (M. de); his pleadings against the infamous proceedings of the Congress, i. 255.

LANGEX, (*the Marquis of*); accused of impuissance, i. 251. Demanded the Congress, and declared impuissant by that tribunal, 252. Remarried, and had children, 253. Consequence of this affair, 255.

LANZONI; observations of this physician on the good effects of the conjugal act, ii. 6.

LAURENT, (DU); his ridiculous questions concerning the distinctive part of the man, ii. 79. That which he says of the melancholic lover, 151. Cited on the hymen, 183, 184.

LEAD; its use among the ancients, for subduing the desires, i. 99. Its preparations, 114. They are dangerous, 115. M. Gardane's observations on this subject, *ibid.* M. Baron cited, 116.

LEMERI, (M.); his chymistry cited, i. 116. That which he says of the effects of the land-crocodile, 125. Of the root of chervil, 127. Of satyrion, 132. Of the good effects of coffee, in cases of sterility, 290.

LETTUCE;

LETTUCE; considered as capable of extinguishing the desires, i. 89. The manner in which this virtue was attributed to it, *ibid.* Its different effects on men, *ibid.*

LEPROSY; it has been pretended that this disease heightens the amorous desires, ii. 25.

LERIDANT, (M.); his Matrimonial Code cited, i. 262, 389.

LEUWENHOEK; his observations on the animalcules of the seed, ii. 222, &c. On the prodigious multiplication of fishes, 239.

LIGAMENTS, ROUND; their use, ii. 104.

LINDESTOLPHE; his prescription against the dreadful effects of cantharides, i. 149.

LINNÆUS; his idea on the degeneration of the human species, i. xvii. Complains that his countrymen imitate the customs and the manners of the French, *ibid.*

LION; its flesh has been recommended as an excitement to love, i. 150. Error of Venette, on this subject, *ibid.* Its flesh is by no means poisonous, 151. Virtues which are attributed to it, *ibid.*

LIQUOR, SEMINAL; its importance with regard to health, i. 120. It must not be imagined that this fluid can be prodigiously augmented by means of aphrodisiacs, 121. Its superabundance may produce injurious consequences, ii. 4. Observation of Galen, *ibid.* Of Zacutus, 5. Of M. Tissot,

ibid. Of Lanzoni, 6. Of Riolan, and M. le Duc, 7. Its importance for health, 8, 9. Dreadful consequences of a too great dissipation of this liquor, 9. Observations extracted from Hippocrates, 11, 12. Description given by Arctæus of the mischiefs which follow too great an evacuation of the seed, 12. That given by Lommius, *ibid.* Filtration of this liquor, 70, 71. Preparations to which it is subjected, *ibid.* The mechanism by which it escapes, 73, 74. Reason why youth do not possess it in great abundance, 125. And men who are very fat, *ibid.* Accidents to which young men expose themselves, by abusing their powers, 144, 145. Ideas which the Ancients entertained of the seminal liquor, 213. Ideas of the moderns, 214. What Hippocrates has said of it, 215. Opinions of Galen, Aristotle, Pythagoras, Plato, Epicurus, Alcmaeon, and M. le Camus, 216, 217. Distinction which ought to be made with regard to this liquor, 217. Hartsoecker examined it in the microscope, 221. Leuwenhock, 222. Hoffman, *ibid.* Observations of the pretended Dalempazius, 223, &c. Authors who have been the dupes of these observations, *ibid.* Opinions of Valisnieri, Heister, Hoffman, Bono, and Verrheyen, 226, &c. Reasons which may be opposed against the spermatic vermicules, 228. Calculations of Leuwenhock, as to the seminal liquor of fishes, 239. Ideas of the seminal liquor, in admitting dissemination, 243. What

What this liquor is, according to M. de Buffon, 245, &c. Its sensible effects, 250. Its energy by men advanced in years, 251. Relative observations, *ibid.* and 252, &c. Its manner of operating in conception, 339.

LITTRE, (M.); cited, ii. 107. His observation on an embryo found in the trumpet, 341.

LOMMIUS; describes the consequences of debauchery, i. 115.

LORRI, (M.); his observations on the effects of opium, i. 160.

LOVE; its physical influence on individuals, i. 60, &c. Means recommended by the ancients, and moderns, for deadening this passion, 99, &c. Is it to be extinguished by the use of nitre? 105. Remedies which have been thought capable of exciting physical love, 117, &c. Impuissance may be occasioned by a too ardent passion, 214. Consequences which are produced by the perusal of tender novels, 419. Diseases which the passion of love may produce, 53, &c. &c. — ii. 4, &c. 10, &c. and 146, &c.

——, PHYSICAL; its influence on the health, ii. 3, &c. &c. Its good effects when moderately used, 4, 9. Its dreadful consequences, 9, &c. See SEMINAL LIQUOR, and PUBERTY.

LOUIS, (M.); cited on the ligature of the spermatic string, ii. 157.

LOUIS

LOUIS XIV.; the method which this monarch adopted to encourage marriages, i. 397. Recompensed fecundity, *ibid*, &c.

LUCIAN; cited on the history of Combabus, i. 74. On the debauchery of Peregrinus, 202. On that of the Tribades, ii. 93.

LYCURGUS; enacted laws against celibacy, i. 394.

M.

MACASSARS; their marriages, i. 437.

MACQUER, (M.); his chymical dictionary cited, i. 313.

MADAGASCAR; the singular taste of the people there in chusing their wives, i. 459.

MADNESS; the manner in which it may be said that this dreadful disease excites to love, ii. 24. Observations, 27.

MALEFICS; the opinion which ought to be entertained of those which, impostors pretend, are capable of rendering men impuissant, i. 237, 239.

MALLEBRANCHE; pretended that Eve had, inclosed in her ovaries, the whole human race, ii. 232.

MANIA; what it is, and that which may sometimes occasion it, ii. 146, &c. &c.

MARRIAGE; case in which it was recommended by Hippocrates, i. 66. Heretics who would have abolished

abolished it, 72. The little agreement between the constitution of spouses may render it sterile, 209. Considerations which ought to weigh in the negociation of marriage contracts, 277. M. Clerc cited on the physical agreements of spouses, 278. Marriage in vogue among all the people of the world, 381. The acts of legislators for encouraging it, 392, 397. It was sometimes interdicted by the Popes, 409. The manner in which the Kamtschadales contract their marriages, 428. The Koriacks, 432, 433. The Greenlanders, 434. The Icelanders, 435. The Buckarians, 436. The Macassars, 437. The Calmucs, 438. The Guebres, *ibid.* The Sabians, 439. The Persians, 441. The Siamese, 442. The inhabitants of the Philippine Islands, 443. The Mingrelians, Georgians, and Circassians, 444. In the states of the Emperor of Morocco, 446. By the Bedouin Arabs, 448. The Indians, *ibid.* The marriage of the Great Serpent in the kingdom of Juda, 450. Of the Idol of Ternate, *ibid.* Ceremonies observed by the American Savages, 454. At Goa, 459. In the kingdom of Arracan, *ibid.* At Madagascar, *ibid.* At Calicut, 460. By the Hottentots, *ibid.* The Chinese, 461. The Russians, 467. At Formosa, 468. At Ceylon, *ibid.* In the kingdom of Lassa, 469. At Congo, *ibid.* They marry at eight years of age in the states of the Great

- Great Mogul, ii. 127. Children capable of marriage in Indostan when nine or ten years old, 128. And also among the Samojedans, 129. The influence of marriage on health, ii. 4, &c.
- MASLACH; a liquor of which the Chinese make use, with their motives for it, i. 190.
- MASSIEU, (*P. Abbé*); his poem on coffee, i. 295. The persons to whom he recommends the use of coffee, *ibid.*
- MATRICE; its figure, ii. 101. Its composition, 102. Its parts, 103, &c. Observations on two matrices which were found in one and the same subject, 107. See FETUS.
- MATTHIOLE; cited on agnus-castus, i. 83. Fables which he has recounted, 95. What he says of the land-crocodile, 126, 128.
- MAUPERTUIS, (*M. DE*); cited, i. 196, 197. ii. 221. That which he observes of the animalcules contained in the seed, 228, 229. His remarks on the prodigality of the germs, 237. And the reply which may be made to his observations, 238, &c.
- MAURICEAU; cited, i. 297. His opinion on the existence of the hymen, ii. 183.
- MEAD, (*Dr.*); his observation on opium, i. 180.
- MEATUS URINARIUS; its description, ii. 94.
- MELANCHOLIC; see TEMPERAMENT.

MELANCHOLY;

MELANCHOLY; may cause impuissance, i. 218.
Dreadful consequences of amorous melancholy,
ii. 146, 147, &c. See **EROTIC ARDOUR**.

MEMORY; may be lost by the use of narcotics, i. 80,
81.

MEN; many have coolly mutilated themselves; see
MUTILATION. A man espoused twenty-one wo-
men, i. 229. Literary men ought to marry,
414. Advice given them by M. Tissot, 416,
417, 418. Some men have died in the moment
of enjoyment, ii. 16, 17, 18, &c. Observations
on this subject, *ibid*.

—, **UNMARRIED**; singular advice given them by
Arnauld de Villeneuve, i. 100. Regimen which
they ought to observe, 110, 113, 114. That to
which they may be compared, 384. Reproaches
which they merit, 386. The manner in which
they were punished by the Spartans, 394. By
Lycurgus, *ibid*. By the Romans, 395. Dis-
eases to which they are exposed, ii. 4. See
SEMINAL LIQUOR.

—, **OLD**; the manner in which they sometimes re-
gain strength by sleeping with young persons, i.
228. Tormented by love, ii. 251, 252, &c.

MENSES; their eruption does not always announce
puberty, ii. 134. Observations, *ibid*. &c. &c.
See **MENSTRUAL FLUX**.

MERCURIAL; advice which he offers to persons of an
amorous

amorous nature, i. 99. Cited on the virtues of borax, 138.

MESSALINA; her impudicity, ii. 43.

METAMORPHOSES of women into men; see GYNANDRES.

METTRIE, (M. DE LA); observation given by this physician on impuissance, i. 225. Cited on the cause of pleasure, ii. 112. Contradicts M. de Maupertuis, 237. His observation on the periodical flux, 276. Denies the reality of a feminal liquor in women, 326.

MIDWIVES; the danger of giving credit to their decisions concerning virginity, ii. 203, &c.

MILK; its use, i. 225. The means for giving it an easy passage, *ibid.* Use made of it by various Nations, *ibid.* Pliny, Galen, &c. speak of it, 226, &c. Good effects of the milk of women, *ibid.* Observations, *ibid.* and 227, &c.

MINGRELIANS; their marriages, i. 444.

MINT; authors who have thought it adapted to cool the fire of love, i. 93. Owes its reputation to the Greek poets, 94. Authors who pretended that it excites concupiscence, *ibid.*

MOGUL; the use made of opium in this empire, i. 186.

MONKS; ordered to chew camphor for extinguishing their concupiscence, i. 90. Arnauld de Villeneuve's advice to them, for resisting the excitements

ments of the flesh, 101. The singular manner in which the Gomerons judge of the sanctity of their priests, ii. 50. The Oriental Monks subjected to infibulation, 174.

MONTAIGNE, (MICHAEL DE); cited on impuissance, i. 213, 217. On imagination, 231. History related by him of a cure which he performed on a gentleman who had been rendered impuissant by means of forcery, 242. This author cited, 323, 327. ii. 16, 34, 165.

MONTESQUIEU; cited on a law of Justinian, i. 256. Observation made by him on marriage, 380. Cited, 332.

MOSCHION; his advice for subduing the amorous desires, i. 99.

MOUNT OF VENUS; what it is, ii. 87.

MUCHO-MORE; use made of it by the Kamtschadales, i. 134. Singular effects which it produces, *ibid.* Observations, 135.

MUSCLES; those of the penis, ii. 55. Their use, *ibid.* Those of the testicles, 65.

MUSIC; its good effects, i. 359.

MUSITAN; cited on virginity, ii. 208.

MUTILATION; observations on this subject, i. 72, &c. Heretics who mutilated themselves, and all those who fell into their savage hands, *ibid.* Singular motives which led some men to mutilate themselves, 74. See PUBERTY.

N.

N.

NARCOTICS; their effect, i. 80, and 118. The name given to these medicaments by the Greeks, and their ideas of the properties which they possessed, 80. The manner of their operation, 174, 189.

NATURE; it cannot be subdued, i. 56. 57. Does not admit of violence, 198. That which she has achieved for the benefit of individuals, 205, &c. &c.

NENUPHAR; its species and its virtues, i. 85. Credulity of Pliny, 86. He deceives himself, *ibid.* That to which we must reduce the virtues of this plant, *ibid.* The Turks use it greatly; and the consequences which the Author draws from thence, 87, 88.

NILE; property of the waters of this river, i. 107.

NITRE; the Ancients have greatly exalted its virtues, i. 101. Authors who have spoken of it, 102. &c. Enthusiasm of the English for this salt, and what resulted from thence, *ibid.* and 104. Reflections of the Author, 105. M. Tiffot's observation as to the effects of nitre, *ibid.* and 106.

NOVELS; bad effects which they may produce, i. 419. Their influence on population, 421.

NYMPHÆ; parts of the woman; their definition, ii. 90. Obstacles which they may oppose to enjoyment, *ibid.*

NYMPHOMANIA;

NYMPHOMANIA; a work so entitled by M. de Bien-ville. Observations extracted from thence, i. 68, &c.

NYMPHOTOMIA; what it is, ii. 90. Is commonly practised in Africa, *ibid.* Is commanded by religion in Arabia and Persia, 91.

O.

OCELLUS LUCANUS; his advice respecting the adaptation of marriages, i. 55, 56.

OPIUM; use made of it by the Egyptians, the Turks, the Chinese, &c. i. 82. An assertion of Wedelius, on its effects, *ibid.* Ought not to be employed for appeasing the amorous passion, *ibid.* The danger of Venette's observation, 157, &c. Observations on the dreadful effects of opium, 160. Experiments made by M. Lorri, *ibid.* and 161. It is a poison that operates according to circumstances, 173. The manner in which it operates, 174. Observations, 176, 177. Becomes a necessity among certain people, 178. Observations, 179. Fury of the Siamese for this substance, 185. Effects which it produces on them, 184. Must be opposite to love, and under what circumstances, 189, 190. Ideas of the Author on this subject, 191, 192, &c.

OPPIAN; cited on the virtues of mint, i. 93.

ORCHIS; fables circulated with respect to this plant; i. 96, 128. See SATYRION.

ORDINANCES; those of the Kings of France, for assuring the birth of children, i. 388, 389. Singular ordinance of the Danish King for repopling Iceland, 393.

ORIENTALS; that which precipitates them to love, i. 166, 167. They do not use opium so much as is generally supposed, 169. Accustomed to the use of ambergris, 311.

ORIGEN; suffered mutilation, from religious motives, i. 72. Badly understood a precept of the Gospel, ii. 154.

OSTRICH; the imaginary virtues which have been attributed to it, i. 156.

OTAHEITE; M. de Bougainville's account of the inhabitants of this island, i. 473. Portrait of the Otaheitans, *ibid.* Politeness of the men towards Europeans, *ibid.* The manner and the publicity of their sacrificing to love, 472, 476, 477.

OTHON BRUNSFELD; cited on castigation, i. 202.

OUTACHEPAS; offer their young women to Europeans, i. 454.

OVARIES; the meaning of this word, ii. 103. Their composition, 104. Opinions of Anatomists on their use, *ibid.*

OXYMEL; recommended against the effects of cantharides, i. 149.

P.

PALE COLOURS; are frequently cured by marriage, ii. 8.

PARACELSUS; cited, i. 102. His extravagant ideas on the nature of the menstrual flux, ii. 260.

PARAPHYMOSIS; what it is, ii. 59. Men frequently have it in the first enjoyment, *ibid.* The means of remedying it, *ibid.*

PARE, AMBROSE; cited on the effects of cantharides, i. 145. On the Congress, 250. On the metamorphosis of a girl into a man, ii. 164. Curious observations of this Author, 97. Cited on the influence of marriage on health, 26. Denies the existence of the hymen, 183, &c.

PARLIAMENT OF PARIS; its maxim with regard to impuissance, i. 266.

PARR, THOMAS; singularities of his life, ii. 252, 253.

PARTS, PRIVATE; Arnauld de Villeneuve recommends cupping and cauterization in these parts, for extinguishing the amorous desires, i. 100. The smallness of the man's distinctive part is no obstacle to fecundity, i. 305. Method adopted by the American females for augmenting the size of the penis, 306. Division of the generative parts of man, ii. 47. The great consideration which these parts enjoyed, 49, &c. See PENIS, PRE-

D d 2

PUCE;

PUCE, TESTICLES, &c. Those of the woman: honours which were rendered them at Syracuse, 83. At Rome, &c. 84. They have been variously ornamented by certain people, 85, &c. Their division, 86. See PENIL, MOUNT OF VENUS, NYMPHÆ, CLITORIS, and MATRICE.

PASSIONS; they increase in solitude, i. 55. Their dominion over the animal economy, *ibid.* 60, 62. 63, 66, 67. They ought to be avoided by persons of the bilious temperament, 284. May cause death, ii. 17.

PEIRESC; his opinion on the generation of stones, ii. 290.

PENIL; what it is, ii. 86.

PENIS; its description, ii. 51, &c. Its muscles, 55. Its defects, 56, 57. Its varieties, 61.

PENIS OF THE HART; see HART.

PERSIANS; have a species of satyrion, i. 129. Liquor which they prepare from it, *ibid.* Effect produced on these people by opium, 186. Their marriages, 441.

PERUVIAN BARK; excellent for fortifying, i. 221. Its good effects, 223.

PETIT, (M.); cited on generation, ii. 157.

PHASIANS; what Hippocrates says of them, i. 341.

PHILIPPINE ISLES; a new-married man, in these isles, causes his bride to be deflowered by a foreigner, i. 459.

PHILEGMATIC;

PHLEGMATIC; see TEMPERAMENTS.

PHYMOSIS; definition of this disease, i. 303. Means of remedying it, 304. ii. 60.

PHYSICIANS; their observations on celibacy, i. 65, 66, 67, &c. Their opinion, at the present day, of anti-aphrodisiacs, 114. Of mithridate, and dia-satyron, 126. Of the sedative salt of Homberg, 141. Advice given them by Hippocrates, 329.

PIBRAC, (M.); cited on the influences of air, with relation to diseases, ii. 29.

PINOËUS; his tract on pudicity, ii. 192. His singular observations, *ibid.* and 193.

PITUITOUS; see TEMPERAMENTS.

PLANTADE, (M. DE LA); published fictitious discoveries on the feminal liquor, ii. 223. Duped several celebrated men, by means of his pleafantry, *ibid.* &c.

PLATERUS; cited, ii. 57.

PLATO; his idea of the feminal liquor, ii. 216.

PLEASURE; what Pannard says on this subject, i. xiii. St. Augustine, 64. The kind of men who are best qualified to enjoy it, 111. Means of which men are capable, in order to procure it, 192. Observations, 192, &c. Considered in a moral and physical point of view, 205, 206. See PHYSICAL LOVE.

PLETHORIC; see TEMPERAMENT.

PLICA; a disease in Poland, ii. 28. Observations, *ibid.* &c.

PLINY; deceived himself as to the virtues of nenuphar, i. 86. Cited on mint, 93. On nitre, 102. On the fecundity of the Egyptian women, 107. On the land-crocodile, 125. On borax, 140. On the fabulous virtues of the hart, 152. On the Romans, 353. On the use of milk, 226. On the dreadful consequences of love, ii. 16. His relation concerning the Gynandres, 162. Cited on the generation of stones, 290.

PLUTARCH; his belief as to the generative virtue of salt, i. 108. Cited on a custom of the Egyptians, 220. On the feminal liquor, ii. 217.

POLLUTIONS; may be excited by nitre, and under what circumstances, i. 106. Observation of Wedelius on the subject, 188.

POLANDERS; make a general use of saffron, i. 162.

POPULATION; encouraged by Lewis XIV. i. 397. Want of subsistence the first obstacle to population, 402. Encouraged in China, 462.

PORTER, (Mr.); cited on the use which the Turks make of opium and wine, i. 170, 171, &c.

POTERIE, (M. DE LA); thesis which he maintained at Paris in 1764, ii. 279.

PREFUCE; the case in which it opposes generation,
i.

- i. 303. An observation, *ibid.* Its composition,
 ii. 52. Its diseases, 58, &c.

PRIAPUS; homage rendered him by the Egyptians,
 ii. 49. The Greeks, *ibid.* The Americans;
ibid. The Phenicians, 50.

PRIAPISM; what Themison says of it, i. 132. Cannot be excited by borax, 142. Cantharides cause this disease, 148. See CANTHARIDES.

PRIVILEGES; enjoyed by some Lords in a singular manner, as to the virginity of new-married women, i. 406. Pretensions of the Canons of Lyons on the same subject, 406.

PROCLUSUS; his vanity, ii. 37.

PROSPER ALPIN; cited on opium, i. 186.

PROSTATÆ; their description, ii. 69. The humour which they contain, 218. The effect which its flowing may produce in women, *ibid.* And in children, eunuchs, and old men, 219, 220.

PUBERTY.; what it is, ii. 114. Signs which announce it, 115, &c. These signs are equivocal by the Americans, 116. Distinction which the Author makes of puberty, 117. That which constitutes this state, according to Nature, 119. Women are sooner pubescent than men; and the reason of it, 124. Its epocha varies according to the manners and the climate, 127. Of the puberty of the Samojedans, 128. Of the Russians, 128. Phenomena in our climate, 132, &c.

Observation of M. de Buffon, 143. Of M. Tissot, 144. Maladies and indiscretions which accompany Puberty, 146, 159, &c. Precautions which ought to be employed as puberty approaches, 160, 161. Ceremonies observed in some Nations; see CIRCUMCISION; EXCISION; MUTILATION; INFIBULATION; and GYNANDRES.

PUCELAGE; see VIRGINITY.

PYTHAGORAS; his opinion relating to the seminal liquor, ii. 216.

Q.

QUAIL; fables which have been circulated on the properties of the quail for exciting to love, i. 157.

QUEEN; singular privilege of the Queen of Congo, i. 470.

QUESNAY, (M.); his observations on the causes of the different temperaments, i. 27.

R.

RAMAZINI; his prescription against the effect of cantharides, i. 149.

RAULIN, (M.); his works cited, i. 403.

REAUMUR, (M. DE); his observations on the animalcules, ii. 247.

RED;

RED; observation concerning men of this colour,
i. 345, &c.

REFRIGERANTS; see ANTIAPHRODISIACS.

REPUBLIC; that of Venice consulted the most celebrated Physicians of Europe on the impuissiance of a noble Venetian, i. 215, 216.

RHUBARB; recommended for giving a passage to milk,
i. 225.

RIOLANUS; his *Anthropographiæ* cited, ii. 50. His opinion respecting the existence of the hymen, 182.

ROBERT, (M.); cited on the menstrual flux, ii. 267.

RODRIGUEZ-A-CASTRO; cited on the use of borax, i. 138.

ROESLER, (M.); his calculations as to fecundity, ii. 276.

ROMANS; their recipe for the cure of sorrow, i. 219. Effect produced on them by the use of cold baths, 222. That which they owed to exercise, 352. The use made by them of infibulation, ii. 176. Their proofs of virginity, 180, 181. Four divinities presided, among them, at the loss of virginity, 212.

RUISCH; cited on the hymen, ii. 182.

RUSSEL, (Mr.); that which he observes, as to the use of opium among the Turks, i. 169.

RUSSIANS; on their temperament, i. 78. Make use
of

of a venomous champignon, 134. Observations, *ibid.* 135. Are castigated in their baths, 203. Particulars relating to their baths, from M. le Clerc, l'Abbé Chappé, and Algarotti, 319, &c. &c. Their marriages, 467, &c.

S.

SABEANS; ceremonies of their marriages, i. 439.

SACRIFICE; that which the Gauls made to love, i. 451. That of the Giaguers, 452. That of the Si-fans, 453. Barbarous sacrifice, by the inhabitants of Goa, 459. Sacrifices much more gentle among the Otaheitans; see OTAHEITE.

SAFFRON; the purpose for which it was used by the Ancients, i. 162. People who yet employ it, *ibid.* Authors who have exaggerated its virtues, 163. Its good qualities, according to Bacon, Scaliger, and Boerhave, 162, 163. Observations which establish its penetrating virtue, 164. Observations which prove that it cannot be employed without danger, 165.

SAINT-FOIX, (M. DE); his Essays on Paris, cited, i. 361, 379, 397, 394, 405, 426, 427, 450, ii. 50, 86.

SALEP; see SATYRION.

SALT; the fecundity of the Egyptian women attributed to it, i. 107. Idea of Aristotle on its generative

rative virtue, *ibid.* Plutarch cited on the same subject, 108. See NITRE.

—, SEDATIVE, of M. Homberg; ideas of Physicians, respecting its virtues, i. 140, 141.

SANCTORIUS; cited on the use of opium, i. 178.
On transpiration, 228. Supposed men subject to periodical evacuations, ii. 278.

SATURN; see LEAD.

SATYRIASIS; Themison's observation on that which attacked the inhabitants of the Isle of Crete, i. 132.

SATYRIUM; what Matthioli says of it, i. 127, 128.
The species of it recommended by Botanists for exciting to love, 128, 129. The Turks have also their satyrium, 129. It is known under the name of salep, 130. The circumstances in which it is employed, 130, 131. Origin of the prejudice in favour of satyrium, 131. Contradictions of authors, 132. Idea of M. Chomel, *ibid.* No confidence ought to be placed in this plant, for exciting to the venereal act, *ibid.*

SAUROMATIANS; that which Hippocrates says of them, i. 341.

SAUVAGES, (M. DE); cited on the effects of air, i. 42. On the privation of the pleasures of love, 67. Observations, *ibid.* &c. On the effect of cantharides, 148, 149. On the ac-
tion

tion of medicaments, 178. Cited, ii. 18, 24, 25.

SAVAGES ; politeness which some of them shew to strangers, i. 454. The manner in which they decide on the weakness, or folly, of a man, 458.

SAVARY, (M.) ; cited on a public rumour, which was found entirely destitute of foundation, ii. 133.

SCALIGER ; cited on camphor, i. 90. His observations on the use of saffron, 162.

SCHEUCHZER ; cited on systems, ii. 297.

SCHULZIUS ; what he says of the virtues of saffron, i. 163.

SCINC-MARINE ;—given by Venette as an aphrodisiac, i. 124. The Arabians avail themselves of it, *ibid.* Not employed by Europeans ; and the reason of it, *ibid.* Contradictions of authors, 125.

SCYTHICA ; a fabulous plant, to which Matthioli attributed singular properties, i. 95.

SCROTUM ; what it is, ii. 64, 65.

SEASONS ; observations on them, with relation to love, i. 363, &c. &c.

SEBA, (ALBERT) ; what he says of the satyrion of the Turks, i. 150.

SECRECTIONS ; they are diminished by the use of narcotics, i. 80.

SEED ;

SEED; see SEMINAL LIQUOR.

SENECA; attributed the fecundity of the Egyptian women to the waters of the Nile, i. 107. What he says of castigation, relatively to love, 203.

SENEGAL; a custom in use there, relative to the propagation of the human species, i. 392.

SERPENT; they marry young women to a serpent in the kingdom of Juda, i. 450. Reflections of M. de Saint-Foix on these marriages, *ibid.* Serpents violate girls in Paraguay, 451. Zeal of the Missionaries in opposing their attacks, *ibid.*

SIAMESE; their fury for opium, i. 183, &c. They avail themselves of it for procuring dreams, 184. The manner in which they pretend to conserve the mouth, 187. Their marriages, 442.

SKIRRET; the opinion of some physicians on it, i. 126. And particularly Venette, *ibid.* Its root is not an aphrodisiac, *ibid.* The circumstances in which it was prescribed by Boerhave, 127. Emmeri's opinion of its virtues, *ibid.*

SOLDIER; one executed, who could not resist an access of erotic fury, i. 63. Accident which happened to another, after having used the *muchomore*, 136.

SOLOMON; cited on virginity, ii. 177.

SOLON; prescribed rules for the duty of a husband towards his wife, ii. 39.

SOMNI-

SOMNIFERICS; see NARCOTICS.

SORROW; has an influence on population, i. 219.
Method adopted by the ancients for banishing it,
ibid.

SOUL; supposed, by some philosophers, to have its
seat in the stomach, i. 182.

SPANIARDS; they are much addicted to the use of
saffron, i. 162.

SPARTANS; the manner in which they punished men
who refused to marry, i. 394.

SPECIES, (*human*); has degenerated in Europe, i.
xvii. Proofs of this assertion, *ibid.* &c. and
213.

SPIGELIUS; cited on the hymen, ii. 182.

SPIRITUOUS LIQUORS; used at night, excite nocturnal
pollutions, i. 114.

STAHL; cited on the use of opium, i. 178.

STENON; pretended to have made the first discovery
of the eggs in women, ii. 304.

STENZELIUS; his remarks on the effects of camphor,
i. 92. Cited on coffee, 293.

STERILITY; exercise may cause it to cease, i. 112.
What ought to be properly understood of this
state, 269. Sterility of the marriage of Henry
II. of France cured by Fernel, 271. Advice to
spouses, whose unions are infructiferous, 272,
273, &c. They ought to repeat the conjugal
act,

act less frequent, 273. An observation, *ibid.*
 Sterility caused by too much ardour, 274. Observation, *ibid.* Apologue, 278. Advice to persons of different temperaments, 282, &c. The circumstances in which we recommend the use of coffee and chocolate, 289. Observation, 290, &c. Advice in several particular cases of sterility, 296, 297, &c. &c. The use of baths recommended, 313, &c. Causes of sterility depend on the air and the water, 328, &c. Sometimes cured by journies, 357, 358. Good effects of electricity, 360.

STUPIDITY; may be caused by the substances employed to subdue the desires, i. 80.

SWAMMERDAM; disputed with Stenon the discovery of the eggs, ii. 304. His opinion on generation, 330.

SWEDES; their temperament, i. 78.

T.

TABOUROT; the whimsicalities of this Author cited, ii. 16.

TACHARD, (FATHER); cited, i. 469.

TAMERLANE; submitted to castigation from motives of debauchery, i. 201.

TALAPOUKES; offer their young women to foreigners, i. 454.

TAVLER-

TAVERNIER; cited on the debauchery of Cha-Gehan, i. 120. Mentions the circumstance of an Armenian who never saw his wife, 369.

TCHOUKTHI; their attention, in procuring pleasure for those who visit them, i. 433.

TEMPERAMENT; that which constitutes it, i. 26. It is not to be subdued, 62. That which may tend to moderate it, 78. That which may set it in motion, 110. Its difference causes dreams to vary in each individual, 184.

—————, BILIOUS; its signs, i. 35. Its good qualities and its defects, 36. What the man of this temperament is in the affairs of love, 37. Advice and regimen which is adapted to him, 283. A state of celibacy is opposite to his nature, 55. That which Venette says of him, 56.

—————, MELANCHOLIC; is by no means in Nature, i. 41. Its signs, 42. In what women of this constitution differ from men, 43. Talents of melancholic men in love, *ibid.* Their defects, 44. Ought they to remain in a state of celibacy? 46. An observation, 47. Advice and regimen, 285.

—————, PHLEGMATIC; that which is to be understood by it, i. 49. It announces a defective nature, 50. Its moral and physical effects, 51. Remarks of M. Clerc on the little aptitude of phlegmatic men to pleasure, 52.

Further

Further observations on this subject, *ibid.* and 53.
 Idea of M. Petit on the phlegmatic temperament,
 288. Advice and regimen, 286.

—————, PLETHORIC; its signs, i. 30. Its
 good qualities and its defects; 31, 32. Talents
 of the plethoric man in love, 34, and 277. Ad-
 vice and regimen, 282. Celibacy is contrary to
 him, 55.

TERNATE; the Priests of this island procure young
 women for their god! i. 450.

TESTICLES; their description, ii. 64, &c. Their con-
 dition shews the more or less considerable strength
 of each individual, 65.

—————, OF THE WOMAN; see OVARIES.

THEMISON; cited on the use of satyrion, i. 132.

THEODORIC; his impuissance, i. 213.

THEOPHRASTUS; his opinion on the fecundity of the
 women in Egypt, i. 107. Miraculous virtues
 which he attributed to a species of orchis, 127.

THIBET; they there implore foreigners to deflower
 their girls, i. 459.

THOMAS; Portrait which he draws of St. Jerome, i.
 61, 62. Cited, 54, 199, 268, 466.

TIBERIUS, (*the Emperor*); employed skirret for ex-
 citing himself to love, i. 126.

TIRESIAS; fabled to have been both man and woman,

ii. 41. Decided that women have greater advantages in copulation than men, *ibid.*

TISSOT, (M.) ; revolution produced by his treatise on Onanism, i. xxi. &c. His observations on the use of nitre, 105. Cited, 109; on opium, 191. The manner of his re-establishing strength, when it has been exhausted by debauchery, 221. Observations which he has given, 224, 233, 298, 318. His advice to literary men, 417; to women, 419. Cited, ii. 5, 13, 31, 92, 149, 268, &c. &c.

TORTOISE ; improperly regarded as an aphrodisiac, i. 156. M. de Buffon cited on this subject, *ibid.*

TOURNEFORT ; cited on opium, i. 186. And on the generation of stones, ii. 290.

TULLY, (M. DE) ; his treatise on the diseases of Dunkirk, cited, i. 356.

TURKS ; the views with which they make use of opium, i. 82. They have a species of satyrion, 129, 185. Particulars as to the use of opium among them, 158, &c. &c. That which excites them to love, 167. Their prejudices with respect to music and dancing, 168. Their passion for wine, 170, 171. The manner in which they habituate themselves to narcotics, 175. They are obliged, by contract, to furnish their wives with coffee, 294. Their use
of

of baths, 314, 315, 316. Bathing prescribed by their religion, 315.

U.

ULLOA; cited on the lubricity of leperous persons, ii. 25.

URETHRA; its description, ii. 54, &c.

V.

VAGINA; the part which is so named, ii. 95. Observation of M. Littre, 107.

VALLEMONT, (*l'Abbé*); cited on the virtues of nitre, i. 103.

VALLESIANS, (*heretics*); castrated every man who fell into their hands, i. 73.

VALLESIUS; his errors, i. 72.

VALLISNIERI; regarded frogs as aphrodisiac, i. 156. His idea on the feminal liquor, ii. 226. Attempted to reverse the system of generation by the eggs, 305; and finishes in a most contradictory manner, 306.

VANDERMONDE; his essay on the manner of perfecting the human species, cited, i. 324. His opinion on conjunctions during summer, 364. Cited, 370.

- VANDERWIEL; cited on puberty, ii. 135.
- VAN SWIETEN; cited, i. 324; ii. 13, 17.
- VARGENTIN, (M.); extract of his Memorial on population, i. 362.
- VAYER, (LA MOTHE LE); cited, i. 194; ii. 49.
- VENEREAL DISEASES; occasion sterile marriages, i. 307.
- VENETTE; those for whom he pretended his Work on Conjugal Love is adapted, i. xxiv. Portrait which he sketches of the bilious man, 56. And of the lascivious man, 76. That which he remarks of camphor, 91; of aphrodisiacs, 123; of the land-crocodile, 124; of satyriæ, 131; of borax, 137; of cantharides, 143; of opium, 157, &c. Cited on *charms*, 241; on the Congress, 250, 256. His remarks on gouty persons, ii. 22; and on the Clitoris, 94.
- VERMICULES, (SPERMATIC); see SEMINAL LIQUOR.
- VESICLES, (SEMINAL); their description, ii. 68.
- VESSELS, (SPERMATIC); their description, ii. 67. What is thus named in women, 105, Anatomists are divided on this subject, *ibid.*
- VINEGAR, (WHITE); recommended against the effect of cantharides, i. 149.
- VIRGINS; their diseases, i. 64, 65. See WOMEN, and VIRGINITY.

VIRGI-

VIRGINITY; the right which some French Lords had to the virginity of their vassals, i. 406, 407. The point of view in which it was considered among the Sabeans, 439. And among the Arabs, 448. It is an obstacle to marriage in several Nations, 459, 460. The remark of Solomon on it, ii. 177. And M. de Buffon, 178. Precautions taken by certain people for assuring the virginity of their daughters, 179. Virginity considered in different points of view by Theologians and Physicians, 181. Contradictions of Anatomists on the marks of virginity, 183. Methods adopted in Russia for ascertaining this state, 194, 195. From whence the blood issues, which women shed in the first embraces, 196. Circumstances which render this effusion a matter of indifference, 197, &c. We ought to place no confidence in pretended signs that are said to establish material virginity, 203, 204. Knowledge which has been attributed to Democritus, and others, of discovering the state of virginity, 210.

VITEX; see **AGNUS-CASTUS**.

VOLTAIRE; cited, i. 38, 62, 246, 425, 428. ii. 3, 336.

W.

WANDERERS; a people so called: some account of them by Hippocrates, i. 343.

WATERS;

WATERS ; the properties which have been attributed to those of the Nile, i. 107. Ferruginous waters recommended for giving tone to the parts, 224. Recommended also against sterility, 309. Inconveniences which result from the use of the water of lakes and marshes, 331, 335. Some waters are too cold, 336, 322. Snow-water, &c. 338. Precepts given by Hippocrates on the use of the different waters, 328, &c.

WEDELIUS ; cited on opium, i. 82, 188. On camphor, 92. On cantharides, 145. And his prescription against their effect, 149.

WIDOWS ; their diseases, i. 63.

WILLIS ; cited on opium, i. 178. On coffee, 294.

WINSLOW ; his opinion on the hymen, ii. 183, 187.

WITCHCRAFT ; see **MALEFICS**.

WOMEN ; a woman interred twenty husbands, i. 229. Affected considerably by too great an attachment to the reading of novels, 419. Respect shewn them by the Gauls, 426. The great number of women of pleasure in Persia, 441. And of common prostitutes, 442. A custom relating to them, *ibid*. Women are nearly all rendered miserable among the Savages, 465. That which M. Chappe says of the female Russians, 467. M. de Bougainville of the women of Pecherai, 465. M. Thomas of the female Savages

vages in general, 466. Pre eminence of the women at Formosa, 468. At Ceylon they have a plurality of men, *ibid.* At Calicut, in the kingdom of Lassa, &c. they enjoy the same privilege, 469. Their privileges in the kingdom of Congo, *ibid.* Account of the Otaheitan women, and the manner in which they receive strangers, 471, 473. Collars for the neck, which the Caffre women make of the virile members of their enemies, ii. 51. Indecent homage which they render in Egypt to the god Apis, 84. Superstition of the Persian women with regard to sterility, 173. Influence of physical love on women in general, 31, &c. Why less subject to the stone than men, 94. The liquor which they emit during the union of the sexes, 218, &c. Those who are the most fecund, 295. See LOVE, CLITORIS, TEMPERAMENT, and MARRIAGE.

WORDS, (MYSTERIOUS); cannot cause impuissance, i. 238.

X.

XENOPHON; his remarks on the virtues of the hart's tail, i. 153.

Z.

ZACUTUS; observation of this physician on the dangers

gers of celibacy, i. 64. Observations on the same subject, ii. 5.

ZINDEL, (M.); has treated of the diseases which are occasioned by continence, i. 67.

ZUINGERUS; cited on the effects of opium, i. 178.
On mutilations, ii. 154.



FINIS.

